DETAILED IMPLEMENTATION PLAN (DIP)

Census-Based Impact-Oriented Child Survival in Huehuetenango, Guatemala
Cooperative Agreement No. HFP-A-10-02-00034-00
Project Start Date: October 1, 2002
Project End Date: September 30, 2007

Submitted to:
US Agency for International Development
Bureau for Global Health
Office of Health, Infectious Disease, and Nutrition
Child Survival and Health Grants Program
Washington, DC

Submitted by:
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Interventions:
30% Nutrition (including breastfeeding promotion)
25% Maternal and Newborn Care
10% Child Spacing
15% Pneumonia
10% Control of Diarrheal Disease
10% Immunizations

Beneficiary Populations: 26,553 children under five years of age and women of reproductive age (12,281 are children under five years of age, and 14,272 are women of reproductive age)

Names and Positions of the DIP Writers:

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Senior Program Specialist, Curamericas
Craig Boynton, MPH
Country Program Manager, Curamericas
Mary DeCoster, MPH
Program Specialist, Curamericas
Mario Valdez, MD
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Revised Budget Narrative

A revised budget and budget narrative is being submitted at this time due largely to changes in staffing in Guatemala. During the staff recruitment period, the CS Program Manager found that the project would be more effective – and recruitment easier – if we were to hire more junior-level staff for some positions (e.g. the Educators) rather than fewer seasoned staff, and if more community-level workers were hired. The resulting changes have led to a much better plan for coverage of the mountainous terrain, but supplies and travel costs (due to increased training and local transportation) increased dramatically (>20%), necessitating a resubmission of this budget.

I. **Field Staff:** Given that this is Curamericas' first Guatemalan endeavor in child survival and our interventions are numerous and complex, we want to phase in interventions and community-level workers in project areas, starting in the more needy rural extension areas first (work which will also be funded in part by the Guatemalan government's SIAS program), and then adding the more highly-concentrated populations closer to town centers.

- *Institutional Facilitators (IF):* The government's SIAS program will cover 45% of the salary support for these workers. IFs are either contracted to do immunization posts, or salaried to do a full range of tasks. We will phase in two salaried IFs during Year One of the project for the San Sebastian municipality: Both will be paid for by USAID and SIAS jointly, and both will be salaried workers. SIAS will provide funds for contracting one IF for each of the two other municipalities in Year One. (There is no fringe on these contracted workers.) In Year Three, USAID funds will be used to bring six IFs up to salaried positions, paying 45% of the six IF positions with match, and using USAID funds for the remainder (55%). Fringe will be paid for these workers based on their full salary rate. Salary levels for the contracted IFs are based on a memo from Edward Scholl at the USAID mission. (Slightly higher levels are proposed given the remote project area.) Higher levels are proposed for *fully-salaried* IFs whose duties will be greatly amplified in this project.
- *Ambulatory Doctors/Nurses (ADs):* Three contracted Ambulatory Doctors or Nurses will be provided to the project by the government SIAS program, will participate in project activities, and be paid in full from the SIAS funds. (Another three ADs, for a total of six, will be provided by the government SIAS program, but will not be highly involved in project activities. These ADs will participate in training, but we have not included them under our match. If their participation were to be included as a match, our match portion would be over 40%.) No fringe is paid to these contracted workers. Salary levels for the ADs (covered by match) are based on staff knowledge of the current local AD salaries.
- *Community Facilitators:* These community-level workers are paid in the government's health scheme. We will hire 4 in Year One then phase in 10 more in Year Two, and 7 more in Year Three. (Matching funds will pay for some of these positions.) There are also 28 other Community Facilitators in San Sebastian, 14 in San Miguel, and 14 in San Rafael, but these have their own

partial salary support from ASSDI (a local NGO) and the MOH. No fringe is paid for these workers.

- ***Key Personnel to Include in Cooperative Agreement:*** The HQ Technical Backstop will be Mary DeCoster MPH. The Field Program Manager (CS Program Manager) will be Mario Rodrigo Valdez (Dr. Valdez).

II. **Field Staff Fringe:** Expenses for fringe are included for field and HQ staff, based on the USAID Mission in Guatemala's Mission Compensation Plan. (Health Insurance has been added to these basic benefits.) **The fringe rate for Curamericas in Guatemala for the first year of the project will amount to 35.43% of salary + $375. For Years 2-5, it will be 41% of salary + $375.** The breakdown of the local benefits is as follows:

- **"14th Month Bonus:"** This is provided in the month of June and corresponds to one month's salary if the worker has worked for one year. If the worker has worked for less than one year, it is pro-rated.
- **Christmas Bonus:** This also corresponds to one month's salary if the worker has worked for one year, and is pro-rated if less than that. Fifty percent of this bonus is paid in December, and 50% is paid in January.
- **"Decree 37-2001" Incentive Allowance:** $375/year
- **Severance Pay:** One month salary for each year of continual service is provided when an employee is dismissed.
- **Insurance:** 16% of monthly salary

Thus, on a yearly basis, these benefits add the following percentages:

- **"14th Month" Bonus:**
  - FY1: 100 * 1/12*8/12 = 5.55%
  - Every additional Year: = 100 * 1/12 = 8.33%
- **Christmas Bonus:**
  - FY1: 100 * 1/12*8/12 = 5.55%
  - Every additional Year: = 100 * 1/12 * 12/12 = 8.33%
- **"Decree 37-2001" Incentive Allowance:** $375/year
  - All years: ($375 for each salaried worker)
- **Severance Pay:** One month salary for each year of continual service is provided when an employee is dismissed.
  - All years: 100 * 1/12 = 8.33%
- **Insurance:** 16% of monthly salary
  - All years: 100 * 0.16 = 16%

The total percentage for benefits in Guatemala is:
FY1: 5.55+5.55+8.33+16 + $420 = 35.43% of salary + $375
FY2-5: 8.33+8.33+8.33+16%+ $420 = 41% of salary + $375

Yearly increases in salaries: Our yearly increases in salary are in line with or slightly below those quoted in a memo to the USAID Mission in Guatemala of April 25, 2002. Yearly increases in salary in that document were between 7% and 9%.

Our increases are for 7% for seven of the (lower-paid) field staff, and 5% for the remaining (higher-paid) staff.

III. **HQ Staff:** Includes the Program Specialists (Tom Davis, Mary DeCoster, and Craig Boynton) Mary DeCoster, MPH will be the main HQ backstop for this project at 35.5%, Craig Boynton, MPH, will conduct the baseline and final organizational capacity assessment (at 4.5% in Years 1 and 5 only), and a Program Administrative Coordinator (Dan Koski) who will help with the day-to-day administrative coordination of the project (at 10%, covered by match). **The inflation rate for HQ staff and other costs in the budget (aside from field staff salaries and fringe) are based on the average inflation rate in the U.S. for the period 1992-2001, being 2.7%.**[1]

IV. **HQ Fringe:** The fringe for Curamericas HQ, as noted in the Budget Narrative and budget formulas, is 20.25%. For HQ, the breakdown of the fringe rate is:

- 7.65% for FICA
- 0.6% for NC Unemployment
- 7.0% for the Cafeteria Plan
- 7.0% for Pension

Total Benefits = 20.25%

V. **Field Travel** -

The following corresponds to numbered items in the budget in Section V.B.:

A. Air Transportation (international)

1. **CS Program Manager (from Guatemala City to RDU):** Funds are requested to permit the CSP Coordinator to travel once a year to the US (from Guatemala City to Raleigh, NC or Washington, D.C.) for meetings and training in Years One, Three, and Five. Airfares are based on quotes at http://www.expedia.com/. (The program manager was funded to come to New Orleans by another organization, so for the Year One meetings he only needed air fare from New Orleans to RDU).

B. Ground Transportation

1. **PT (public transportation), Huehue. to San Miguel, pick-up truck:** Funds are requested for field travel including travel for one trip per month to San Miguel (project area office) by a pick-up truck from Huehuetenango for project supplies. (All costs are based on an exchange rate of 8Quetzales / 1 USD, the current rate for August 2002.)
2. **PT to San Miguel from Guatemala City:** One trip roundtrip per month to the Capital from San Miguel by the CS Program Coordinator going to project-related meetings.
3. **Travel from San Miguel to Quetzal:** Two monthly trips from San Miguel to Quetzaltenango (Curamericas (Guatemala) main office) for two people each

[1] See http://www.eh.net/ehresources/howmuch/inflationq.php. inflation rate.

month (e.g., CSP Coordinator and Administrator). Different people may go each month depending on the need.

4. **Travel for CS Startup Workshop:** Transportation for 23 participants (stakeholders and project staff – see table below) to the CS startup workshop from various parts of the project area to San Rafael where one of the two workshops will be located. (For the workshop in San Rafael, no transport costs are anticipated.) Cost is 30Q ($3.75USD/person) on average based on previous experience with similar functions in the project area.
5. **Travel for Curamericas Admin. Training:** Transportation for 13 people attending this two-day training. (26 person-days). Local transport, based on an average of 30Q per person from past experience.
6. **Travel for Assessment of Organizational Capacity:** Transportation for 11 people attending this four-day training (44 person-days). Local transport, based on an average of 30Q per person from past experience.
7. **Travel for Health Facility Assessment:** Transportation for 12 people attending this seven-day activity (84 person days). Local transport, based on an average of 30Q per person from past experience.
8. **Travel for Census/Mapping Training:** Transportation for nine people attending each day of two different two-day trainings held in two different areas within the project area (36 person-days). Local transport, based on an average of 30Q per person from past experience.
9. **Travel for Supervision and CQI Training:** Transportation for 34 people attending each day of this four-day training (136 person-days). Transportation from San Miguel to Huehuetenango at 110 Quetzales ($13.75) based on past experience.
10. **Travel for Sustainability Workshop:** Transportation for 6 people attending each day of this two-day training (12 person-days). Local transport, based on an average of 30Q per person from past experience.
11. **Travel for HIS Training, Management staff:** Transportation for 24 management staff attending each day of this two-day training (48 person-days). Local transport, based on an average of 30Q per person from past experience.
12. **Travel for HIS Training, CFs and IFs:** Transportation for 4 CFs, 6 IFs, and HIS Specialist to this one-day workshop in Year One, plus transportation for the remaining 16 CFs and HIS Specialist to this one-day workshop in Years Two and Three. (4 person-days + 16 person-days) Local transport, based on an average of 30Q per person from past experience.
13. **Travel for Clinical IMCI Training:** Transportation for 17 clinicians (see table below) for 15 days of training in IMCI. (255 person-days) making three trips (one each week, going home on weekends). Transportation from San Miguel to Huehuetenango at 110 Quetzales ($13.75) based on past experience.
14. **Travel for Community IMCI Training:** In Year One, transportation for 19 people (see table) for 15 days of training in IMC (285 person-days), making three trips (one each week, going home on weekends). For Year Three, transportation for 10 additional CFs for 15 days of training in community IMCI (150 person-days), making three trips. Transportation from San Miguel to Huehuetenango at 110 Quetzales ($13.75) based on past experience.

15. **Travel for Immunization Workshop:** Travel for 14 people for each of the five days of an immunization workshop from different parts of the project area to the District Health Office. (60 person-days) (No food budgeted – covered by the MOH.) Based on an average of 30Q per person from past experience.
16. **Travel for TIPs/PD Training:** Travel for 23 people for each of the seven days of this workshop (161 person-days). Transportation from San Miguel to Huehuetenango at 110 Quetzales ($13.75) based on past experience.
17. **Travel for Health Volunteer Educ. Mod. Trng:** Travel for 22 people for each of the five days of this workshop (110 person-days). Local transport, based on an average of 30Q per person from past experience.
18. **Travel for SCM of Pneumonia Training, Year Two:** Travel for 17 people for each of the two days of this workshop (34 person-days) in Year Two. Local transport, based on an average of 30Q per person from past experience.
19. **Travel for SCM of Pneumonia Training, Year Three:** Travel for 13 people for each of two days in Year Three (26 person-days). Local transport, based on an average of 30Q per person from past experience.
20. **Travel for GM/P and Nutrition Training:** Travel for 27 people for each of the four days of this workshop (108 person-days). Local transport, based on an average of 30Q per person from past experience.
21. **Travel for TOT on Mat. & NB Care Trng:** Travel for 19 people for each of the five-days of this workshop (95 person-days). Local transport, based on an average of 30Q per person from past experience.
22. **Travel for Epi-Info Training:** Travel for 14 people for this five-day workshop (60 person-days). Transportation from San Miguel to Huehuetenango at 110 Quetzales ($13.75) based on past experience.
23. **Travel for Pocket PC Training:** Travel for six people for each day of this three-day training (18 person-days). Local transport, based on an average of 30Q per person from past experience.
24. **Travel for Nutrition Refresher Training:**
25. **Travel for TOT for TBA training:** Travel for 19 people for each day of this five-day training. Local transport, based on an average of 30Q per person from past experience.

Trainings in the project area will be held at the District MOH office in San Miguel. For these trainings, transportation and food are included in the cost (but not lodging). Some of the trainings (e.g., those provided by the MOH or provide by Curamericas for participants from throughout the Huehuetenango area) will need to take place in the Area MOH office (in Huehuetenango) as indicated in the details above. Transportation, food, and overnight lodging will be included for these trainings. (Participants who are from other municipalities outside the project area who attend the training in Huehuetenango will be asked to cover their food, lodging and transportation; hence no costs for those participants are listed in the budget.) The Community and Clinical IMCI trainings are particularly costly in that they are long and involve many participants.

Costs for travel to trainings held in Huehuetenango are based on **$13.75** for roundtrip travel from San Miguel in the project area to Huehuetenango. Costs for

travel to trainings held in San Miguel (in the project area) are based on **$3.75** on average for transportation of participants in the project area to San Miguel. All Guatemala travel expenses were based on travel receipts in the past year of the current project staff in the project municipalities. They inquired directly of travel providers when necessary.

Food/lodging for Guatemala trips by HQ staff is based on $60/day, and $165/day for WDC trips (both based on experience in the last year). (Consulting trips to the project site by Curamericas' Bolivian partner, CSRA, are included in a flat consulting fee in the contractual section of the budget.) We anticipate significant training in Year One of the project, including training of administrative staff and training and retraining of most field staff in interventions (see Section V.B. for details). Most of these trainings will be covered by USAID funds.

Funding for some trainings (e.g., HIS system, immunization workshop) will be paid for by the MOH. The **per diems** for workshop participants listed in this section are for people who will be trained in each workshop, as laid out in the training table below. The number of persons budgeted for per diem is included in the budget as a separate column. Food costs in San Miguel are **$3.75**/participant/day based on experience in the past year. Food costs in Huehuetenango are based on **$10.63**/day/participant for food and lodging -- Q35 for food, and Q50 for lodging -- based on quotes at hotels in Huehuetenango.

Please see the table on the next page that outlines which participants will attend which workshops, and the number of days involved in each workshop.

Training Table

Codes for table: **CSPC** = Child Survival Program Coordinator; **CPC** = Country Program Manager (Curamericas); **SPS** = Senior Program Specialist (Curamericas); **PS** =Program Specialist, Curamericas; **HIS** = HIS Specialist; **SEC** = Secretary; **IFs** = Institutional Facilitators (who are nurses); **ADs** = Ambulatory Doctors/Nurses; **EC** = Education Coordinator; **DDs** = District Doctor(s); **MRLs** = Micro-region Leaders; **ADM** = Program Administrator; **HFN** = Other health facility nurses (registered and auxiliary) in the MOH and ASSDI health facilities; **CFs** = Community Facilitators (paid CHWs, some of whom will be managed by ASSDI, some by the MOH, and most by Curamericas); **MAC** = MOH Area Chief. **TBAs** = Traditional Birth Attendant. **TD** = Tom Davis; **MDC**=Mary DeCoster; **CB** = Craig Boynton; **JB** = Jennifer Babula. MOH and ***NGO participants throughout the Huehuetenango Area will be included in selected trainings.***

Training	Days	# of People	Who Invited	Trainers (HQ staff in parentheses)
CS Startup Workshop	1 day x 2 locations	32	Huehue: CSPC, Jefe del Area (MAC), 7 other participants = 9 people. San Miguel: CSPC, HIS, 3 ADs, DD, 10 HFNs, 12 MRLs, EC, 4 IFs. = 23 people	SPS Curamericas and staff (TD)
Curamericas Administrative Training and Staff Orientation	2 days	13	CSPC, ADM, DD, HIS, SEC, 4 IFs, 3 ADs, EC	SPS Curamericas & FUMESDER staff (TD)
Administration of SIAS Funds (MOH sponsored)	5 days	3	CSPC, ADM, 1 DD	MOH, from SIAS funds
Baseline KPCs, LQAS, & FGDs (See Contractual section)	2 weeks	23	CSPC, HIS, 4 IFs, 3 ADs, EC, MAC, and 12 CFs (interviewers)	Consultant (Carol Tumaylle)
Baseline Org. Capacity Evaluation	4 days	11	CSPC, HIS, 4 IFs, 3 ADs, ADM, EC	CPC Curamericas (CB)
Health Facility Assessment	7 days	12	CSPC, HIS, 4 IFs, 3 ADs, MAC, 2 ASSDI Reps	Curamericas (MDC)
Census / Mapping	4 days	9	CSPC, HIS, 4 IFs, 3 ADs	CSRA and CURAMERICAS staff
Supervision and CQI	4 days	34	CSPC, HIS, 4 IFs, 3 ADs, 10 HFNs, DDs, 12 MRLs, MAC, EC	Curamericas (MDC)
Sustainability Workshop	2 days	6	CSPC, ADM, 3 DD, MAC	Curamericas (JB)
Use of HIS Forms (MOH sponsored)	2 days	20	3 ADs, 1DDs, 10 HFNs, 4 IFs, 1 HIS, 1 EC	MOH
Use of HIS Forms for Promoters	1 day	17	12 CF, 1 EC, 4 IFs	IFs (CURAMERICAS), Educ. Coordinator
Immunization (MOH sponsored)	5 days	14	4 IFs, 10 HFNs	MOH
IMCI Clinical	15 days	17	3 ADs, 4 IFs, 10 HFNs	Calidad en Salud trainer
Community IMCI, Year 1	15 days	19	CSPC, HIS, 4 IFs, 12 CFs, EC	Calidad en Salud trainer
Community IMCI, Year 3	15 days	10	10 CFs	Calidad en Salud trainer
TIPs and PD Training & Evaluation	7 days	23	CSPC, 4 IFs, 3 ADs, EC, 2 CFs + 12 others from Huehuetenango Area MOH and NGOs	Curamericas (MDC)

Training	Days	# of People	Who Invited	Trainers (HQ staff in parentheses)
NFE, Educational Methods, and Use of Guardian Modules	5 days	22	CSPC, 4 IFs, EC, 4 CFs + 12 other participants from Huehuetenango Area MOH and NGOs	Curamericas (MDC)
SCM of Pneumonia	2 days	17	EC, 4 IFs, 10 HFNs, 2 CFs	Curamericas/MOH
GM/P, Nutrition, and Micronutrients, Year 2	4 days	27	EC, 4 IFs, 10 HFNs, 12 CFs	Curamericas (MDC)
GM/P, Nutrition, and Micronutrients, Year 3	4 days	11	EC, 10 CFs	Curamericas (MDC)
Epi-Info	5 days	14	CSPC, HIS, 4 IFs + 8 participants from Huehuetenango Area MOH and NGOs	Curamericas (MDC)
Child Spacing Training (MOH sponsored)	4 days	19	CSPC, EC, 4 IFs, 10 HFNs, 3 ADs (who train TBAs and CFs)	MOH
PocketPC Training	3 days	6	4 IFs, HIS, CSPC	Curamericas (MDC)
Nutrition refresher course	2 days	39	EC, 6 IFs, 10 HFNs, 22 CFs	Curamericas
TOT on Maternal and Newborn Care	5 days	19	CSPC, EC, 4 IFs, 3 ADs, 10 HFNs (and these train TBAs)	Curamericas PS (MDC) and JHPIEGO trainer Dr. Yadira Villaseñor

The Startup Workshop will take place in Huehuetenango for 10 participants, where only food will be paid, and in San Miguel for 24 participants, where transport and food will be paid. Many of the first year trainings will only include the 4 IFs hired at that point. (The other two IFs hired in Year Three will be trained by the CSPC and IFs hired in year one through inservice training.)

Please note that Year Three will only include trainings for Community Facilitators in the areas phased in during Year Three. All other staff from these areas will be trained in Year One and Two. CFs in this new area phased in during Year Three will be trained by the Institutional Facilitators in their communities for many tasks (during their regular meetings and special meetings). Special group trainings for phase two are listed in the last column of this table.

VI. HQ Travel

A. International Transportation

1. **CS Backstop (3/year, RDU to Guatemala):** HQ travel includes three visits from Raleigh (RDU) to Guatemala City for onsite training and support each year. (See Training Table for the trainings/tasks that will be completed during these visits.) Roundtrip tickets from Raleigh to Guatemala are estimated to be $610. This is based on a quote from Canyon Creek Travel (Curamericas' travel agency)

of $610 as of 6/20/02. Also included is roundtrip taxi fare from the SPS' home to the airport ($40/trip, $80 roundtrip, based on recent travel), and $310 for travel insurance based on a quote at http://www.travelassistance.com/

2. **Country Program Manager, RDU to Guatemala):** Two trips are scheduled from Raleigh to Guatemala City for Curamericas' Country Program Coordinator for conducting the baseline and final Organizational Capacity Assessment.
3. **Executive Director (RDU to Guatemala):** One visit from Raleigh to Guatemala City per year (except for year one) is scheduled for Curamericas' Executive Director for general project oversight, backstopping in sustainability, etc.
4. **Ground Transportation in Guatemala:** This is for ground transportation for the four trips per year mentioned above, from Guatemala City to San Miguel (project area office). The cost is $34 roundtrip for two seats on the bus (the seats are very small).

B. Domestic Air Transportation

1. **CS Backstop (3 trips/year from RDU to WDC):** HQ travel includes three trips from Raleigh to Washington, DC each year for meetings by Curamericas' Senior Program Specialist (CS backstop) such as the annual CORE meeting (when in WDC), CORE Working Group Meetings, technical meetings, the DIP review, etc. The cost for air travel from Raleigh to WDC is $174 roundtrip based on a quote from Canyon Creek Travel for airfare from RDU to BWI ($144) plus $30 ground travel from BWI to WDC downtown (based on a quote from Super Shuttle on 8/8/02).
2. **CS Backstop to CORE Meeting, from RDU to San Francisco:** Travel for one flight to the West Coast in Year One for the CORE Annual Meeting in April 2003 (expected to be held on the West Coast according to discussions by the CORE Board of Directors). The cost of this flight was based on air travel from RDU to San Francisco, $392, based on a quote at www.expedia.com). All of these trips except those made by the Executive Director will be paid for from USAID funds.

C. HQ Per Diem

1. Costs for food/lodging during trips to Guatemala are based on an average of expenses during travel made during the past year to the project site and Guatemala City.
2. In-country (WDC) food/lodging is based on Curamericas' expenses for food/lodging in WDC during the past year, and less than the 2002 CONUS maximum rate[2] of $196/day for food/lodging.

VII. **Field and HQ Equipment –** No field or HQ equipment purchases are planned within this proposal.

VIII. **Field Supplies –** Institutional Facilitators (IFs) will require a number of items in support of their roles as trainers and supervisors:

- Helmets and rain jackets are essential gear for frequent travel into the field.

[2] See http://www.policyworks.gov/org/main/mt/homepage/mtt/perdiem/perdiem.cfm?st=DC&yr=2002

- The backpacks and watches included in the supplies are low-cost ones that need to be replaced each year. They will be used in pneumonia case management.
- Weighing scales will be purchased initially, and some replaced due to wear and tear during the course of the project. These will be used in growth monitoring/promotion.
- Four vaccine refrigerators will be purchased by the MOH as part of CURAMERICAS participation in the SIAS program for the EPI program.
- Six motorcycles will be purchased with match money for the IFs.
- One 4 wheel drive vehicle will be purchased with match money for the Curamericas field staff.
- The Education Coordinator and the Community Facilitators also will receive very basic supplies similar to those of the IFs.
- Heavy duty flip charts will be provided to 153 Traditional Birth Attendants (TBAs) during the first year, and replacement flip charts are anticipated for the fifth year.
- (Prices for all of the above materials are based on the project staff's experience with purchasing these items as part of their current project activities.)
- Bookshelves are included for the CSP Coordinator, Program Administrator and Secretary (used jointly), Education Coordinator, HIS Specialist, and 3 health centers.
- Tripods, newsprint, and markers, will be provided to each health center.
- The first year includes funds to prepare flipcharts for 296 Health Volunteers in the first phase of the project. In the second phase (beginning Year Three), all 599 HVs will receive updated flipcharts that have changes in the design based on the first two years use. An incentive (e.g., clothing) will be given to the Health Volunteers each year as an incentive and Christmas gift. This will be covered through in-kind donations from churches or corporations in the U.S. (These HVs will be the primary community educators in this project, with each HV visiting 12-20 HH during each two-week period.) Prices for these flipcharts were based on local quotes for photocopying them. Development of the flipcharts will be done by field and HQ staff.
- One laptop computer, three desktop computers, software for each computer, and computer desks are included for the CSP Coordinator, the Program Administrator and Secretary (jointly), the Education Coordinator, and the HIS Specialist. The laptop is a Micron V1000 priced at www.micronpc.com. Desktop computer prices are based on prices for new standard desktop computers in Guatemala.
- Eight Pocket PCs and software are included for the six Institutional Facilitators (IFs),the (one) HIS Specialist, and the CS Program Manager. The quote for these is based on a quote for a HP Jornada 545 purchased from LA Computer Center (www.lacc.com). One portable keyboard is included is well, which will be shared by users when narrative reports are entered on the pocket PCs. The quote for that is based on a quote from Page Computers (www.pagecomputers.com). The Pocket PCs will be used by the IFs to automate HIS data entry at the community-level and to assist with rapid surveys. (We have consulted with David Cantor at CSTS about using this technology.)

- One B&W inkjet and one color inkjet printer is requested for the project field HQ, and one laser jet printer and scanner are requested for the use of the CSP Coordinator and Education Coordinator. (The color and laser printer is requested for producing high-quality educational and training materials.) The overhead projector and overhead sheets will be used for trainings of different levels of staff. The prices for these are based on quotes from OfficeDepot.com.

IX. **HQ Supplies:** Office supplies for the HQ are budgeted to support the Senior Program Specialist. These supplies include:

- Xerox Primary Image Copy Paper, one box, $31.99
- HP TwinPack Inkjet Cartridges, HP C6578AN High Capacity TriColor Ink Cartridge, $54.99 x 4 = $219.96
- HP TwinPack Inkjet Cartridges, HP C6650AN Blister Twin Pack, $52.99 x 4 = $211.96
- Vision Elite Black Rollerball Pen, 4Pk, $7.99 x 6 = $47.94
- Assorted Sizes Binder Clips, $2.59 x 3 = $7.77
- Tape, 1" core, ¾" x 650", $1.88 x 2 = $3.76
- Report covers, Navy Flexi-View Report Covers, $4.99 for 2 pk x 4 = $9.98
- Large envelopes, Tan self-sealing bubble-lined envelopes, 10 ½ x 15, $4.49 for 5 pack x 4 = $17.96
- Small envelopes, Meade High-Count Office Pak Envelopes, No. 10 w/security lining = $9.99 for 250/box. = $9.99
- Stamps, $0.34 each, 5 booklets of 20 = $34.00
- Post-it Portable Flags, $3.99 pack x 1 = $3.99
- Post-in Notes, 3x3", 5 pk, $5.79 x 2 = $11.58
- Highlighter, Stabilo, $1.79 x 4 = $7.16
- Glue stick, $1.09 x 2 = $2.17
- Liquid Paper all-purpose Correction Pen, $3.79 for 2 pack x 1 = $3.79
- ***(All of these prices are based on a quote from www.officedepot.com.)***
- Total = $624.00

X. **Contractual, Field:**

- The Curamericas/Guatemala office will contract with an AID approved auditing firm each year to conduct the Guatemala portion of the AID required "single audit." The quote that we have received for that from a local CPA is $750 for Year One and $500 for each of Years Two to Five.
- Curamericas in Guatemala will also contract for HIS/CBIO training and technical assistance from Curamericas' Bolivia partner (CSRA). The budgeted amount includes $952 for the flight from Bolivia to Guatemala (based on a quote on www.expedia.com), $30/day food & lodging in Guatemala for 8 days, and a training fee of $200/day x 10 days. During the first 8-day consultancy in Year One, CSRA will travel to the project site, review Curamericas programs for a day, and conduct a three-day training on the CBIO methodology – focusing on mapping and the census – which is a critical part of Curamericas' strategy. (Four days will be taken for roundtrip travel to the project site.) There will be follow-up technical assistance provided by CSRA to CURAMERICAS for two days, for

a total of 10 days at $200/day (CSRA's customary fee for this type of TA – CSRA has provided this TA to Curamericas' other partner NGOs). A second workshop will be carried out in Year Three – costs will be similar to the first training – but this training will focus on certain elements in the Health information System (e.g., verbal autopsies and mortality reviews). The total costs for these two consultancies will be:

- Two trips from La Paz, Bolivia, to Guatemala City, roundtrip: $952 x 2 = $1,904
- Two trips from Guatemala City to San Miguel (project site), roundtrip: $15 x 2 = $30
- Per diem during both consultancies: 16 days x $50/day = $800
- Consultancy Fee: 16 days + 4 days follow-up = 16 days x $200/day = $3,200
- Guatemalan Visas: $25 x 2 trips = $50
- $5,984, $2,992 per consultancy.

- Outside consultants will be used for the baseline KPC survey, the midterm evaluation, and the final evaluation. No contractual services are included for the Curamericas HQ office.

The Baseline KPC costs will include:

- A consultant for 19 days at $250/day = $4,750
- Two 4WD vehicles for transport of the interviewers and supervisors at $100/day (includes gas) for five days: $1,000
- Two drivers for five days at 100Q/day = 2x100/8x5 = $125
- 12 interviewers (Community Facilitators – hired staff) x 8 days = (Project staff – no added cost)
- 6 supervisors: 2 IFs (project staff—not added cost) + 4 others x $25/day x 9 days = $900
- Food/lodging for KPC team members (12 interviewers + 6 supervisors + 1 AD + Consultant + HIS Specialist + CS Program Coordinator + Education Coordinator + Administrator) = 24 people x 105Q/day x 12 days = 24 x 105/8 x 12 = $3,780
- Photocopies: 5 cents/copy x (20 sheets/questionnaire * 300 questionnaires + 21 people x 50 sheets of training materials + 10 copies of the KPC report x 75 pages + 12 QI Checklists x 5 days) = 7,860 copies x 0.05 = $393
- Data entry personnel: 200Q/day x 2 people x 4 days = 200/8 x 2 x 4 = $200
- Data analysis by consultant and Senior Program Specialist: (No extra charge)
- (These costs are based on quotes secured by the project staff in Guatemala in August 2002.)

Total costs of KPC: $11,148

The midterm evaluation includes one consultant at $500/day for 14 days =$7,000 (We have increased the amount per day in order to be able to contract an experienced international consultant).

The Final KPC costs will include:

- Evaluation Consultant x 16 days at $500/day (consultant not involved in final KPC) = $8,000 (We have increased the amount per day in order to be able to contract an experienced international consultant)
- Two 4WD vehicles for transport of the interviewers and supervisors at $100/day (includes gas) for five days: $1,000
- Two drivers for five days = $125
- 12 interviewers (Community Facilitators – hired staff) x 8 days = (Project staff – no added cost)
- 6 Supervisors: We will use 6 IFs (Project staff – no added cost)
- Food/lodging for KPC team members (12 interviewers + 6 supervisors + Consultant + HIS Specialist + CS Program Coordinator) = 21 people x 105Q/day x 12 days = 21 x 105/8 x 12 = $3,308
- Photocopies: 5 cents/copy x (20 sheets/questionnaire * 300 questionnaires + 21 people x 50 sheets of training materials + 10 copies of the KPC report x 75 pages + 12 QI Checklists x 5 days) = 7,860 copies x 0.05 = $393
- Data entry personnel: 200Q/day x 2 people x 4 days = 200/8 x 2 x 4 = $200
- Data analysis by project staff and Program Specialist: (No extra charge)

Total costs of Final Evaluation: $13,026

XI. **Contractual, HQ: None.**

XII. **Other Direct Field Costs:**

- This includes charges for telephone, internet, electricity, water, natural gas, postage, and computer and building repair and maintenance services. One-time charges for telephones lines are included for three telephone lines at a cost of 2,500Q/line (based on a local quote provided by COMCEL in Guatemala). The telephone lines will permit project staff to communicate through the national telephone system, while the cellular phones will permit staff to communicate when they are outside the municipal health centers (e.g., on supervision trips). (Using cellular phones will be less expensive than establishing a two-way radio system.)
- Calls to the U.S. from the project site using the cellular phones are based on 250 minutes per month at USD $0.33/minute (current cellular rates for Guatemala).
- Local and national calls are based on 818 minutes/month (about 35 minutes per day, including downloading of e-mail) at USD $0.33/ minute (current rates for Guatemala).
- Internet service is based on $10/month for internet service for two separate sites: the CURAMERICAS HQ office near Quetzaltenango, and the San Rafael office in the project site.
- Computer repair and maintenance is based on one computer repair per year at $150/repair based on project field staff previous experience.
- Postal/courier is based on one couriered letter per month. All other correspondence will be through e-mail, fax, and telephone.
- Maintenance, oil, and gasoline is provided for 8 motorcycles, the six purchased (with match) during this project, as well as the two provided by the government as a match that will be utilized by the Ambulatory Doctors/Nurses. These costs are based on the

CS Program Manager's (Mario Valdez') past experiences operating health programs in the project area and the current local costs for oil, gasoline, and maintenance fees.

- The Health Facility Assessment materials are based on 12 participants at the HFA workshop x 50 pages per person (600 photocopies) + 50 pages of forms x 12 participants (600 photocopies) + vehicle usage for 4 days ($100/day) for a total of (1,200 x $0.05 + 4 x $100) = $460.
- Funds for electricity in two health posts in San Sebastian and two "Unidades Minimas" in San Miguel is included. The natural gas for 4 vaccine refrigerators is for 2 vaccine refrigerators that will be purchased as part of this project (as a match) and two that are already in existence in the project area (in health facilities where the cold chain is inadequate due to stock-outs of natural gas).

XIII. **Other Direct Costs, HQ:**

- Phone/fax charges are based on monthly charges of $63, representing 150 minutes of calls/faxes per month to Guatemala (based on our carrier's rate (New South) of $0.42/minute to Guatemala.
- Charges for iPASS international internet service (for use while in Guatemala) is based on one thirty minute session each day for each of the three, eight-day trips to Guatemala a year with a $11.14/hour iPASS connect fee (based on a quote from iPASS).

XIV. **Construction, HQ** -- Curamericas has sponsored U.S. volunteer work teams to our CS projects in Bolivia for the past 16 years. We plan to continue this program in the proposed Guatemala CS project sites, with approximately 3 teams (1 per year in Years 2, 3, and 4) visiting Guatemala. These teams will be composed of US volunteers who pay their own expenses and also contribute toward the cost of a community development project in which they share the labor with community members. They will build remote health posts with local community members, delivery houses mentioned in the maternal and newborn intervention (pg.71, and maternal and child health clinics mentioned in the **sustainability section**. Work teams have proven to be an invaluable "development education" tool educating U.S. citizens on the nature of US PVO health and CS projects overseas, providing needed cash resources for health-related community development projects, and promoting good will among recipient populations toward the U.S. A portion of these volunteers return to the US and become long-term supporters of U.S. international development efforts, friends and donors to Curamericas. Each team costs approximately $29,000 to be placed in the field.

Total Direct Expenses – Total direct costs requested from AID to support the proposed CS project is **$1,031,745**. The portion of the overall budget covered as a **match is 35.1%**.

The total estimated expenses for HQ requested from USAID are $159,373, representing **12.3%** of the total budget. Total field costs requested from USAID are **$872,372**.

Indirect Expense – The AID approved indirect rate for Curamericas is currently **26 percent** based on our latest NICRA agreement.

USAID Total – The total amount requested of AID to support this project is **$1,300,000**.
Cost per Beneficiary – Given that there we proposed to serve approximately 26,553 CS beneficiaries, this represents a cost of $9.79 of USAID funds per beneficiary per year. The total USAID cost per beneficiary per year is $9.79. While this may be higher than some other organizations working in Latin America, Curamericas is the only organization working in Latin America that can document its achievements in dramatic reductions in mortality. Curamericas expects to phase out recurrent expenses in the second of two five-year grant periods.

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List of Acronyms

AD	Ambulatory Doctor
AN	Ambulatory Nurse
ARI	Acute respiratory infection
ASSDI	Associacion for Integrated Development
BCC	Behavior change communication
CBIO	Census-based, impact-oriented
CDD	Control of diarrheal diseases
CF	Community Facilitator (a.k.a., Promoter)
C/G	Curamericas Guatemala
CI	Confidence interval
CS	Child survival
DHS	Demographic and Health Survey
EPI	Expanded program of immunizations
FOCAS	Foundation of Compassionate American Samaritans
FUMESDER	Fundación Médica Social para el Desarrollo Rural
GH/HIDN	Bureau for Global Health, Office of Health, Infectious Disease, and Nutrition
GM/P	Growth Monitoring / Promotion
HFA	Health Facility Assessment
HH	Household
HV	Health Volunteer (a.k.a., Comunicator)
HQ	Headquarters
IF	Institutional Facilitator
IMCI	Integrated Management of Childhood Illnesses
KPC	Knowledge, practice, and coverage
MCH	Maternal and child health
MG	Municipal Government
MMR	Maternal mortality rate
MNH	Maternal and Neonatal Health
MOH	Ministry of health
NGO	Nongovernmental organization
ORS	Oral rehydration serum
PD	Positive deviance
QI	Quality Improvement
QIVC	Quality Improvement Verification Checklist
RHF	Recommended Home Fluids
SIAS	Integrated Health Care System (a Guatemalan government program)
TBA	Traditional Birth Attendant
TIPs	Trials of Improved Practices
TT	Tetanus Toxoide
U5MR	Under-five mortality rate
USAID	United States Agency for International Development
WAZ	Weight-for-age Z-score
WRA	Women of reproductive age

SECTION A. EXECUTIVE SUMMARY

This Detailed Implementation Plan provides a five-year work plan for Curamericas' New *Child Survival Program* project in Guatemala. Curamericas is completing the last year of a primary health care and micro-enterprise development project (through USAID/BHR/PVC/MGP) in an adjacent department of Quetzaltenango, and is eager to further its activity in Guatemala in order to promote the 1996 Peace Accord process of reconstruction and reconciliation. This project is located in three under-served municipalities of the northwest region of Guatemala in the Department of Huehuetenango: San Sebastian Coatan, San Miguel Acatan, and San Rafael la Independencia. These municipalities are three of 32 located in the department, and are inhabited by over 66,000 individuals, of whom 12,281 are children under five years of age, and 14,272 are women of reproductive age (15 – 49 years). The population is entirely indigenous, mostly members of Acatecan and Chuj tribes.

Guatemala's under-five mortality rate is 59, the infant mortality rate is 45, and the neonatal mortality rate is 23 per 1,000 live births. For the northwest region where the project is located, the IMR is reported to be 50 and the neonatal MR is 23. The U5MR is 71 for this region, making it the second highest in the country. The maternal mortality rate is calculated each year by the MOH for the project area. The country-wide maternal mortality rate (MMR) is reported to be 190, and the average MMR for the three municipalities during 2000 was estimated to be 486 per 100,000 live births. Deaths from hemorrhage and sepsis are common, as are pre-eclampsia and eclampsia. The northwest region has the lowest proportion of women who receive prenatal care from a health professional in the country (38%). It also has the highest proportion of women who have never received a dose of tetanus toxoide (53%) and the lowest proportion of women who delivered in a health facility (10%).

The level of chronic malnutrition in Guatemala is the highest in Latin America (50%), higher than that reported in Haiti (32%) and Bolivia (29%). A baseline anthropometry study conducted by Curamericas found that 43% of children 0-23m were underweight (moderately or severely), and 16% were *severely* underweight in the project area. As children leave infancy, their nutritional status worsens: 62% were moderately or severely underweight, and 19% were severely underweight.

The *Overall Program Goal* is to significantly improve the health and nutrition of preschool children and women of reproductive age, with a focus on decreasing perinatal, infant, and maternal mortality, in the rural communities and town centers of the San Rafael de la Independencia, San Miguel Acatán, and San Sebastian Coatán municipalities through improvements in health care and health promotion access, quality, and coverage.

The general objectives of this program are the following:

- Improve the scope and quality of preventive and curative care provided to children and pregnant women through household visits, outreach, and improved facility-based care.

- Improve the prevention of childhood illness in the home, as well as home recognition, treatment and care-seeking for illness when it occurs.

These objectives will be reached by implementing Curamericas' Census-Based, Impact-Oriented (CBIO) approach to health care and the Integrated Management for Childhood Illnesses (IMCI) and Community IMCI strategy. Our major interventions include: nutrition (including breastfeeding promotion; 30%); maternal and newborn care (25%); child spacing (10%); pneumonia (15%); control of diarrheal disease (10%); and immunization (10%).

Curamericas will work through its own nationally incorporated NGO, *Curamericas – Guatemala*, and will maintain a full-time CS Program Coordinator in Huehuetenango, Dr. Mario Valdez, MD. He will be supported by the Curamericas headquarters backstop, Ms. Mary DeCoster 35%, and by Curamericas' Executive Director, Ms. Jennifer Babula, at a level of 5% (through PVO matching funds). Curamericas principal partner will be the Curamericas subsidiary in Guatemala, Curamericas – Guatemala. Other local partners that will receive project support are the Guatemalan NGOs FUMESDER (Fundacion Medica Social Para el Desarrollo Rural) and ASSDI (Associacion for Integrated Development), and the MOH health districts of San Miguel Acatán, San Rafael la Independencia, and San Sebastian Coatán.

Curamericas will provide technical assistance, training, and capacity building support to Curamericas-Guatemala and the MOH for the five year period. The project began on October 1, 2002 for duration of five years, through September 30, 2007. Curamericas seeks US AID CSP financial support at a level of $1,300,000 for the five year period, and commits at least $325,000 in matching financial support during that same time period. Mr. Edward Scholl is the Health Section contact person for this project within the US AID Mission in Guatemala City, and we have spoken with him several times regarding this project. The primary authors for this proposal were Tom Davis and Craig Boynton, with considerable additional support offered by Mary DeCoster and Mario Valdez. Field personnel and partner representatives played integral roles in the development of this implementation plan, during our many discussions, meetings and data collection activities. Mary DeCoster will serve as the official contact person at Curamericas headquarters for this proposed project.

SECTION B. CSHGP DATA FORM

Child Survival Grants Program Project Summary
DIP Submission: Apr-29-2003
Curamericas Guatemala

Field Contact Information:

First Name: Mario

Last Name: Valdez

Address: 4a. Av. 6-50A, Zona 1

City: Salcaja

State/Province: Quelzaltenango

Zip/Postal Code:

Country Guatemala

Telephone: 011-502-768-7042

Fax: 011-502-768-7042

E-mail: mariofumesder@hotmail.com

Project Web Site:

Project Information:

Project Description:	This Detailed Implementation Plan provides a five-year work plan for Curamericas' New Child Survival Program project in Guatemala. The Overall Program Goal is to significantly improve the health and nutrition of preschool children and women of reproductive age, with a focus on decreasing perinatal, infant, and maternal mortality, in the rural communities and town centers of the San Rafael de la Independencia, San Miguel Acatán, and San Sebastian Coatán municipalities through improvements in health care and health promotion access, quality, and coverage.
Partners:	Curamericas-Guatemala; Fundacion Medica Social Para el Desarrollo Rural; District health offices of the Ministry of Health
Project Location:	This project is located in three municipalities of the northwest region of Guatemala in the Department of

	Huehuetenango: San Sebastian Coatan, San Miguel Acatan, and San Rafael la Independencia.

Grant Funding Information:

USAID Funding:(US $)	$1,300,000	**PVO match:(US $)**	$ 325,000

Target Beneficiaries:

Type	Number
0-59 month old children:	12,281
Women 15-49:	14,272

Beneficiary Residence:

Urban/Peri-Urban %	Rural %
(No Data)	100%

General Strategies Planned:
Social Marketing
Strengthen Decentralized Health System
Information System Technologies

M&E Assessment Strategies:
KPC Survey
Health Facility Assessment
Organizational Capacity Assessment with Local Partners
Organizational Capacity Assessment for your own PVO
Lot Quality Assurance Sampling
Community-based Monitoring Techniques

Behavior Change & Communication (BCC) Strategies:
Interpersonal Communication
Peer Communication
Support Groups

Capacity Building Targets Planned:

PVO	Non-Govt Partners	Other Private Sector	Govt	Community
US HQ (General) US HQ (CS unit) Field Office HQ	Local NGO	(None Selected)	Dist. Health System Health Facility Staff	Health CBOs CHWs

Interventions:

Immunizations 10 **%**
** IMCI Integration
** CHW Training
** HF Training

*** Classic 6 Vaccines
*** Vitamin A
*** Surveillance
*** Cold Chain Strengthening
Nutrition 20 **%**
** IMCI Integration
** CHW Training
** HF Training
*** Comp. Feed. from 6 mos.
*** Hearth
*** Cont. BF up to 24 mos.
*** Growth Monitoring
** IMCI Integration
** CHW Training
** HF Training
** CHW Training
** HF Training
Acute Respiratory Infection 15 **%**
** IMCI Integration
** CHW Training
** HF Training
*** Pneum. Case Mngmnt.
*** Case Mngmnt. Counseling
*** Access to Providers Antibiotics
*** Recognition of ARI Danger Signs
Control of Diarrheal Diseases 10 **%**
** IMCI Integration
** CHW Training
** HF Training
*** Hand Washing
*** ORS/Home Fluids
*** Feeding/Breastfeeding
*** Care Seeking
*** Case Mngmnt./Counseling

Maternal & Newborn Care 25 **%**
** IMCI Integration
** CHW Training
** HF Training
*** Neonatal Tetanus
*** Recog. of Danger signs
*** Newborn Care
*** Post partum Care
*** Delay 1st preg Child Spacing
*** Integr. with Iron & Folate
*** Normal Delivery Care
*** Birth Plans
Child Spacing 10 **%**
** CHW Training
** HF Training
*** Child Spacing Promotion
*** Pre/Post Natal Serv. Integration
Breastfeeding 10 **%**
** IMCI Integration
** CHW Training
** HF Training
*** Promote Excl. BF to 6 Months
*** Intro. or promotion of LAM
*** Support baby friendly hospital

Indicator	Numerator	Denominator	Estimated Percentage	Confidence line
Percentage of children age 0-23 months who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population)	209	486	43.0	4.4
Percentage of children age 0-23 months who were born at least 24 months after the previous surviving child	134	260	51.5	6.0
Percentage of children age 0-23 months whose births were attended by	22	257	8.6	3.5

skilled health personnel				
Percentage of mothers of children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child	40	256	15.6	4.4
Percentage of infants age 0-5 months who were exclusively breastfed in the last 24 hours	93	148	62.8	7.7
Percentage of infants age 6-9 months receiving breastmilk and complementary foods	53	119	44.5	8.9
Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the first birthday	85	203	41.9	6.8
Percentage of children age 12-23 months who received a measles vaccine	101	203	49.8	6.9
Percentage of children age 0-23 months who slept under an insecticide-treated bednet the previous night (in malaria-risk areas only)	0	0	0.0	0.0
Percentage of mothers who know at least two signs of childhood illness that indicate the need for treatment	53	256	20.7	5.0
Percentage of sick children age 0-23 months who received increased fluids and continued feeding during an illness in the past two weeks	28	95	29.5	9.2
Percentage of mothers of children age 0-23 months who cite at least two known ways of reducing the risk of HIV infection	13	427	3.0	1.7
Percentage of mothers of children age 0-23 months who wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated	152	445	34.2	4.4

SECION C. DESCRIPTION OF THE DIP PREPARATION PROCESS

The DIP preparation process was organized by Curamericas' headquarters program staff and followed the guidelines of the USAID/GH/HIDN Child Survival Grants Program Guide for Detailed Implementation Plans (revised September 2002). The process was participatory and included the participation of Curamericas' headquarters staff, program staff from Curamericas/Guatemala (C/G), and selected Ministry of Health (MOH) health personnel in the areas. The staff and partners involved in the DIP process included:

- Tom Davis, Curamericas Senior Program Specialist
- Jennifer Babula, Curamericas Executive Director
- Mary DeCoster, Curamericas Program Specialist
- Craig Boynton, Curamericas Country Program Manager
- Gladys Shanklin, Curamericas Program Coordinator
- Mario Valdez, Curamericas-Guatemala Child Survival Program Coordinator
- Sergio Perez, Curamericas-Guatemala Administrator
- Dr. Julio Villatoro, MOH Huehuetenango Departmental Director
- Jovani Castañera, Accountant MOH Huehuetenango Office
- Juan Maldonado, Responsible for C-IMCI
- Rafael Rodríguez, District VII Director
- Pedro Diaz, Municipal Facilitator DECOPAZ

Initial DIP preparation was conducted from February 17 to 20, 2003 during Dr. Mario Valdez's visit to Curamericas' headquarters in Raleigh, NC. At this time the DIP guidelines and the proposal reviewer's comments were reviewed, dates for further activities in Guatemala were scheduled, and key materials and people needed for the preparation of this DIP were identified. In addition, Curamericas' program staff and the C/G Project Director reviewed the key program strategies, budget, and interventions as outlined in the initial proposal.

From March 24 to 28, 2003 Mary DeCoster, Curamericas Program Specialist (CPS), led a Health Facility Assessment of selected MOH facilities in the provinces of San Miguel Acatán, San Miguel la Independencia, and San Rafaél Coatan, and assessed C/G's administrative capacities.

Craig Boynton met with field personnel from April 7 to April 11 and led the staff in discussing and revising the major interventions and activities, reviewed baseline data, and reviewed relevant local information and MOH norms and policies. During this week the CPM met with representatives of the MOH in Huehuetenango and in the health district of San Miguel Acatán to discuss the project, seek their input, and obtain local agreement and support for the project.

Changes to the budget and other information were gathered through regular contact between Curamericas HQ and the C/G office via telephone and e-mail.

Curamericas has thoroughly discussed this project with the MOH office in Huehuetenango, and they have enthusiastically supported it. A new cooperative agreement was presented to this office in March but has not been signed. The MOH Departmental Director has stated to C/G Child Survival Program Coordinator that the document has been sent to MOH HQ in Guatemala City for final revision and approval, which should be done in early May.

The key activities that were implemented include the following:

- Qualitative and quantitative baseline data was collected and included a Knowledge, Practice and Coverage (KPC) survey, focus groups, and a health facility assessment;
- Project staff met and discussed this project with key partners including the district Ministry of Health (MOH) staff, department-level MOH representatives in Huehuetenango, Desarrollo y Cooperacion para la Paz (DECOPAZ), municipal and community leaders and local UNICEF representatives;
- Revision of program strategies, interventions, and activities;
- Revision and refinement of the project budget; and,
- Redeveloped a project work plan that includes the key project tasks, activities and project personnel responsible.

SECTION D. REVISIONS FROM THE ORIGINAL PROPOSAL

Changes in Budget

A revised budget and budget narrative is being submitted at this time due largely to changes in staffing in Guatemala. During the staff recruitment period, the CS Program Coordinator found that the project would be more effective – and recruitment easier – if we were to hire more junior-level staff for some positions (e.g., the Educators) rather than fewer, seasoned staff. It was also decided to hire more community-level workers (CFs).

The resulting changes have led to a much better plan for coverage of the mountainous terrain, but supplies and travel costs (due to increased training and local transportation) increased dramatically (>20%), necessitating a resubmission of the budget. A revised budget and budget narrative are included with this document.

Changes in the Number of Beneficiaries

There are no changes in the number of project beneficiaries for this project. The population of the three municipalities where this project will take place has a total population of 56,743 inhabitants. The total number of women of reproductive age (15 – 49 years of age) and preschool children (under five years of age) that will be served by this project are 26,553: 12,281 children and 14,272 WRA.

Project Area Municipality	Year 1	Year 2	Year 3	Year 4	Year 5	Preschool Children	WRA	Total Beneficiaries
San Sebastian Coatán	19,317	20,090	20,893	21,729	22,598	4,181	4,859	9,039
San Miguel Acatan	24,092	25,056	26,058	27,100	28,184	5,214	6,060	11,274
San Rafael de la Ind.	13,334	13,867	14,422	14,999	15,599	2,886	3,354	6,240
Totals	56,743	59,013	61,373	63,828	66,381	12,281	14,272	***26,553***

Changes in Project Site

There are no proposed revisions in the area where this project will be implemented. As mentioned in the original proposal, this project will be implemented in the three municipalities of San Sebastian Coatan, San Miguel Acatan, and San Rafael la Independencia, located in the Northwest region of Guatemala in the Department of Huehuetenango. A map of the project site is included in **Annex D**. The municipalities are located in the highlands (*altiplano*) of Guatemala and approximately five hours from Huehuetenango and 11 hours from Guatemala City, both using public buses.

Changes in Program Description

In January of 2002, FUMESDER began experiencing leadership and financial difficulties that inhibited its ability to adequately carry out its program operations. Many of FUMESDER's Board of Director members were inexperienced and did not have substantial program experience or the leadership capacities necessary to serve as FUMESDER's source of vision and growth. As a result, the Board of Directors experienced constant turnover leaving FUMESDER without any long-term strategy, mission, or goals.

At the same time, Curamericas' Board of Directors was completing its year-long evaluation of program / partner sustainability and Curamericas' future role in the field. Since 1983, Curamericas has implemented its field work through local NGO's acting as counterparts. These partnerships were created to increase the local organization's programmatic, administrative, and financial capacities in order to become self-sustainable. To that end, local counterparts maintained their autonomy and operated independently from Curamericas. Throughout Curamericas' twenty-year history, the counterpart model has been evaluated, with results indicating mixed levels of success. For several stronger counterparts who achieved sustainability, Curamericas maintained the partner relationship without any exit strategies or change in mutual expectations, thereby encouraging a role and relationship of funding sources rather than technical resource. Meanwhile, other less mature partners demonstrated instable leadership, and under Curamericas' "counterpart" approach, Curamericas had no authority to add its input or guidance.

After much research and analysis, Curamericas' Board of Directors concluded that the risks associated with maintaining the counterpart model in Guatemala, given the aforementioned instability and lack of organizational management capacity, was inconsistent with both organizations' aspirations for long-term sustainability. As such,

Curamericas' Board of Directors suggested a modification to its "counterpart" approach towards its relationship with FUMESDER in Guatemala. The resulting "subsidiary" model has been developed by Curamericas and FUMESDER as a preferable alternative to the existing counterpart model. Under this structure, the Child Survival – 18 / Guatemala program will be operated and directly managed by Curamericas-Guatemala, a legally registered Guatemalan NGO. Curamericas-Guatemala, in turn, is a subsidiary of Curamericas. All technical, administrative, and financial staff working on the CS-18 program are employees of Curamericas-Guatemala and report directly to Curamericas HQ.

With this new approach, Curamericas will heavily invest in ensuring FUMESDER's long-term sustainability. Throughout the life of the CS-18 program, Curamericas will provide training in Board membership development, long-range strategic planning, and overall program management experience to FUMESDER and its local Board of Directors. Additionally, Curamericas will assist FUMESDER with securing funding for new initiatives that meet their organizational objectives.

While Curamericas mentors FUMESDER through its institutional development, FUMESDER will continue to serve as a direct collaborator of this program. Curamericas will both welcome and encourage FUMESDER's continued participation in the CS-18 program, enabling them to leverage additional community development and health programs based on their experience and growth under the CS-18 program.

Changes in Management Plan

Changes in the organizational structure reflect the change in relationship with FUMESDER and recent HQ staffing changes. Curamericas' Board of Directors and Jennifer Babula, Curamericas' Executive Director will have ultimate supervisory and financial responsible for this project. In addition, Curamericas' Executive Director implemented a series of personnel changes and unit restructuring to improve the technical unit's ability to improve their relations with the field, standardize the quality of services provided, and increase the overall support provided to its programs. These changes included the termination of a management position, a re-structuring and clarification of responsibilities, and the hiring of a coordinator whose Master in International Relations will serve as an asset to the organization's role in programmatic strategies, identification of new programs and countries for expansion, and presence within advocacy environments.

The technical backstopper for the project is Mary DeCoster, MPH, Curamericas' Program Specialist (PS). Tom Davis, MPH, Curamericas Senior Program Specialist (SPS), and Craig Boynton, MPH, Curamericas Country Program Manager (CPM), will be providing selected technical and program support. Mario Valdez, M.D., is C/G's Country Director and the Child Survival Program Coordinator (CSPC).

Under Curamericas' new subsidiary model, the Child Survival – 18 / Guatemala program will be operated and directly managed by Curamericas-Guatemala, a legally registered

Guatemalan NGO. Curamericas-Guatemala, in turn, is a subsidiary of Curamericas. All technical, administrative, and financial staff working on the CS-18 program are now employees of Curamericas-Guatemala and report directly to Curamericas HQ. A revised project organizational chart is included as **Annex E**.

Changes in Overall Program Objectives

Based on recommendations from the proposal review, the objectives of this project have been revised to reflect this project's focus on effecting change at the household, community and health facility level.

The *Overall Program Goal* is to significantly improve the health and nutrition of preschool children and women of reproductive age, with a focus on decreasing perinatal, infant, and maternal mortality, in the rural communities and town centers of the San Rafael de la Independencia, San Miguel Acatán, and San Sebastian Coatán municipalities through improvements in health care and health promotion access, quality, and coverage.

The *new* general objectives of this program are the following:

- Improve the scope and quality of preventive and curative care provided to children and pregnant women through household visits, outreach, and improved facility-based care.
- Improve the prevention of childhood illness in the home, as well as home recognition, treatment and care-seeking for illness when it occurs.

These new objectives reflect that the approach of the project is primarily based on providing maternal and child health services through a system of community outreach using health educators, Institutional Facilitators (IF's), Community Facilitators (CF's), Health Volunteers (HV's), and Care Groups. This structure is in accordance with the MOH plan of providing primary health care services to rural populations. According to this plan, each MOH health center will cover a population of 10,000, and each health post will serve 2,000 people.

Additional Changes to Project Strategies

The original proposal mentioned that FUMESDER was awaiting a major grant from the MOH health project "*Sistema Integral de Atención en Salud (SIAS)*" to provide financial support in expanding health care services to the project communities. This support was to enable FUMESDER to expand access to maternal and child health services in the health districts by hiring additional health personnel and materials. Since submitting the proposal SIAS funding has not materialized, and SIAS has committed to providing funding to *only* those NGOs that had received funding prior to 2001.

As a result of this, the program budget has been revised reflecting changes in the number of field personnel. The number of CF's hashas been reduced from twenty-four to twenty which will reduce the number of scheduled community visits and contacts with Care Groups from twice monthly to once a month. Health outreach posts (*jornadas*) will

continue monthly in the communities, but the number of training sessions that the CF's will receive will reduce from two a month to once a month. Project staff do not believe that this will affect the coverage rates or being able to achieve the program goals since the jornadas will provide opportunities for the field staff to provide health education and conduct immunization, growth monitoring, micronutrient supplementation, and deworming activities.

*Responses to the reviewer comments are included in **Annex A**.*

SECTION E. DETAILED IMPLEMENTATION PLAN

1. Program Monitoring and Evaluation Plan

a) Monitoring Tools -- How progress towards program objectives will be measured and how data will be collected, analyzed, and used for program management: Curamericas has been a leader in the CS community in documenting vital events, and measuring changes in mortality rates, and will continue to build the Guatemalan MOH's and local Curamericas staff's ability to use the methodology during this project. As a member of the CORE Monitoring and Evaluation Working Group, Curamericas' Senior Program Specialist is up to date on state-of-the-art M&E methods and strategies. In the list below, strategies are presented that will be utilized to collect, analyze, and monitor project data (including mortality rates), both at the level of service provision, and at the level of capacity transfer to our partners.

- **Project expansion and coverage goals** have been established in this DIP which will serve as a set of benchmarks of coverage progress.
- **Detailed indicators have now been established.** These reflect not only changes at the **household level**, but other changes in terms of **quality of care**, **performance of health workers**, **changes at the community level** (e.g., functioning of Care Groups), and **inter-institutional skills transfer** in administrative, managerial, and technical areas (capacity building of the local partner).
- **A census will be conducted in all project communities.** This is an essential part of Curamericas' census-based, impact-oriented (CBIO) approach to child survival, and – now that the baseline assessments are completed – will begin over the next few months. The census is the main mechanism for determining the number of beneficiaries served (the population denominator). (See **Annex I** for a Census Checklist that gives details on the census process.) The census data is updated continually – prompted by **reports of vital events by the Health Volunteers (in the Care Groups)** as vital events occur. A house-to-house updating of the census will be done every twelve months, as well. The census includes a retrospective study on mortality during the past year, which allows staff to get an idea of the pattern of child deaths (e.g., at what age children are dying from certain classifications of illnesses) so the interventions and the contact schedule can be further modified to have more of an impact on mortality. This census, along with regular updating when vital events are reported, will also enable managers to analyze patterns of mortality and make changes in project strategies in order to decrease child deaths. The census form used

was developed and field tested by the Guatemalan MOH, and will be modified to include the information for the retrospective mortality review.

- Curamericas will conduct **annual Rotating Mini-KPCs** in the project communities as the main way to monitor the degree to which mothers' **practices** have changed, and to verify that the most important **coverage** information collected during routine procedures (e.g., filling out immunizations on the child registry) is correct. Curamericas' Senior Program Specialist has published on[3], and trained others in, this methodology which is part of the Title II FAM Monitoring Toolkit. With this methodology, a short KPC-type questionnaire is administered each year to a sample of mothers of children less than two years of age (all 120+ mothers represented by one randomly-selected Care Group per Institutional Facilitator, chosen without replacement). Since the Care Group membership roles will cover all mothers in the project area, the sampling will be akin to 30-cluster sampling, but will have a higher design effect since the number of [larger] clusters will be reduced to 14, one per supervision area. This methodology was tested in Mozambique during Title II projects, however, and results from the monitoring using this methodology late in the project were similar to results found in the final KPC. See http://www.foodaid.org/worddocs/moneval/toolkit/TIIToolkitIIIC.doc for a more detailed description of the methodology. The KPC questionnaire used for this mini-KPC has not yet been developed, but will include questions to collect information on a limited set of indicators (much shorter than the baseline KPC).
- **Exit Interviews** (using negative response cases) will be used to **monitor client satisfaction** with services provided at health facilities and through the Health Volunteers in the project area once every six months. For more details on this methodology, see http://www.foodaid.org/worddocs/moneval/toolkit/TIIToolkitIIIB.doc which was written by Curamericas' Senior Program Specialist. Data will be colleced by people who do not work at the health facility (e.g., Community Facilitators associated with the health facility)
- **Ensuring Quality of Data**: The Institutional Facilitators will ensure that community-level data are valid through **random spot checks** of the data during home visits to project beneficiaries, comparing household level data (e.g, the child's growth chart) to data in the MOH's child registry, women's registry, and the vital events registry forms. The Ambulatory Doctors/Nurses will check the **quality of the community and health-facility data collected by the Institutional Facilitators** through spot checks as well as review of the process used by IFs to collect and enter data. They will receive guidance and assistance in this by the project's Health Information Specialist.

b) The current health information system in the program area, and areas in which the project's HIS will differ: The Guatemalan MOH has a set of 33 HIS forms, most of which will be used in this project. This system of forms has been developed over a period of many years and is "here to stay" in Guatemala. The forms used at the community-

[3] Review of Health and Agriculture Monitoring Tools for Title II Funded PVOs, Prepared for Food Aid Management (FAM) by Thomas P. Davis Jr., MPH, and Julie Mobley, MSPH, 2001

level, however, are not burdensome. A staff member of the MOH has trained the CS project staff in use of these forms.

Meetings have been held with the CS Program Coordinator in order to identify which forms will be used in the project as is, and which need to be modified. Several additional HIS forms have been added to those already in use by the MOH. These new forms are (a) compatible with the MOH HIS forms already in use in the project area, and (b) consistent with our experience with the CBIO methodology in Bolivia and Haiti. (See below for details on the forms that will be introduced.) The HIS will be a manual system up to the level of the Curamericas project office in San Miguel, where data is keyed into a software program used by the MOH for reporting and evaluation.

These forms meet most of the needs of this project, the needs of the community, and the needs of Curamericas. Overlapping of data is minimal. There is some (necessary) duplication of data in that children's data is included both on the growth chart which is carried by the parent, and a register of children maintained by the health facility. When children receive services in the facility, the event (e.g., immunization) is recorded both on the parent's HIS form – the Carnet (which has spots for recording other health data) – and the HIS form maintained by the health facility (e.g., the child registry, Form 5A). All of the forms aside from the growth chart are available in electronic form, so it is possible to modify the forms to include other locally-needed data. For the few pieces of data that are needed but not currently included on one of the MOH HIS forms, a space will be added to an existing form for collecting the needed data. For example,

- A box for recording the mothers feeding practices (the "**behavior box**") will be added to the growth chart using a sticker (as was done by Curamericas in Haiti) [See **Annex M** for a copy];
- Information on vitamin A dosing and deworming of each child will be added to Form #5A, the MOH's child registry form.
- A spot for recording whether the mother received Vitamin A postpartum, whether she received iron during her pregnancy, and whether she was educated on each maternal and child health theme will be added to the MOH's women's registry form.

When pregnancies, births, or deaths occur, or new families move into or out of a community, the Health Volunteers will notify the Community Facilitator during the Care Group meetings. These women and children are then entered into the MOH women's registry and child registry in a particular supervision area (jurisdiction), and become visible to the project's health workers. Once this has happened, if a woman or child does not come for services that area offered (e.g., immunizations at posts in the community), home visits are made to follow-up.

There are five monitoring tools (counting the QICLs as one tool) that **Curamericas will add to the MOH's HIS** in order to better understand the feeding practices of each mother, to better understand the patterns of child and maternal deaths and how to avoid them, and to gather information on the quality of trainings and other key processes carried out during the project:

- **Behavior Box**: This is a sticker that is put on each growth card in order to do monthly monitoring of specific behaviors of the caregiver (e.g., exclusive breastfeeding). (See **Annex M** for a translated copy of the form that will be used in Guatemala.) The use of this tool is described in the Monitoring Toolkit previously cited at: http://www.foodaid.org/worddocs/moneval/toolkit/TIIToolkitIIIC.doc
- **Maternal Verbal Autopsy Form:** Curamericas developed this form during its Haiti CS project to gather information on deaths of women. Curamericas vebal autopsy forms are used to discover system problems so that further premature deaths can be avoided. See **Annex K** for a sample.
- **Child Verbal Autopsy Form**: Curamericas developed this form during its Haiti CS project to gather information on deaths of preschool children.See **Annex J** for a sample.
- **Pre- and posttests** will be used in conjunction with QIV checklists to measure the quality and effectiveness of trainings. (See **Annex N** for a sample of the pretest/posttest recording form.)
- **Quality Improvement and Verification (QIV) Checklists** will be used by the Ambulatory Doctors/Nurses, Institutional Facilitators (IFs) and Community Facilitators (CFs) **to monitor and improve the performance of health workers and community volunteers (i.e., the Health Volunteers) and the quality of key processes and intervention activities** (see **Annex H** for an example), and to measure the impact of trainings on fieldwork. QICLs will be used to verify and improve the quality of the following processes:
  - Group education sessions (e.g., Care Group sessions and groups session in health facilities);
  - one-on-one counseling;
  - growth monitoring/promotion,
  - IMCI (we will use the WHO checklist for this one);
  - Immunization, vitamin A supplementation, deworming, and iron supplementation;
  - conducting training sessions;
  - family planning counseling;
  - use of nonformal education methods (songs/poems, stories, and testimonies);
  - interviewing during annual mini-KPC surveys; and
  - management of severe malnutrition (under development).

See the Supervision section of this DIP on **page 59** for more information on the use of QICLs. These QICLs were developed and field tested by Curamericas' Senior Program Specialist who has been heavily involved in QI activities and trainings in the child survival community, and formerly was on the CORE QI Working Group. (For more details on these checklists, see http://www.foodaid.org/worddocs/moneval/toolkit/TIIToolkitIIIA.doc). The QIV checklists also serve as a way to **assess the essential knowledge, skills, practices and the availability of supplies** (including drugs and equipment) used by health workers since these elements are included in the checklists. (For example, the GM/P checklist asks, "does the health worker have a functioning scale? Does the health worker have at least 5 blank growth charts?") Other means of promoting quality will be the use of standard curricula and manuals, and use of the IMCI protocols.

The MOH does not currently use the behavior box, pre- and posttests and the pre/posttest recording form, or the QI checklists, so these will be introduced to the staff during this project, and their M&E skills will be strengthened through the addition of these tools. The MOH does have a verbal autopsy form, but it does not provide enough information on *reasons for delays* in recognition and treatment of illnesses. For that reason, we will promote the use of our VA forms instead. The information on VAs is not transmitted up the chain to regional MOH offices, so it will not be a problem to use a different VA form locally.

All of these forms listed above have been used in at least one of Curamericas other child survival projects and were **field tested** after development. During the early implementation of these forms (especially for the verbal autopsy forms), information will be collected on the suitability of the forms, and adjustments made where necessary.

Strengthening of the project staff and MOH partners' skills in M&E is being accomplished through the trainings that have already been provided by Curamericas – trainings in the use of **focus groups, anthropometry, KPC, LQAS, HFA, and HIS forms** – and through trainings that will occur over the life of the project (i.e., **trainings in community mapping, census procedures, analysis of PD data** [e.g., use of 2x2 tables]**, Epi-Info, and Pocket PC use**). Feedback during regular supervision will supplement these trainings, as well.

In October 2004, the Institutional Facilitators will be trained to use **Pocket PCs.** Pocket PCs will be used in one jurisdiction (supervision area) of the project to collect data at the community- and clinic-levels, which will enable them to rapidly enter and upload data to computers in the project area office, and speed analysis and project response time to important data. If this trial is successful, we will expand the use of Pocket PCs to more supervision areas.

c. ***How health information will be analyzed, used, and shared with stakeholders and parters:***

Monitoring and analysis of HIS data (including vital events) **will be done to monitor program progress, improve program processes, and improve program performance during the joint Curamericas/ MOH CS coordination committee meetings.** This team meets every month, facilitated by the CS Program Coordinator, and is responsible for responding to trends seen in the monitoring data. Every quarter, this team will call a special session to review tables and graphs generated by the HIS Specialist, and hear verbal reports by project staff. As is done in other Curamericas countries where CBIO is being used, verbal autopsy data will be reviewed once every year. **This committee will disseminate its main findings and suggested action to each health facility and project staff member, and the district MOH offices, through a concise, written summary report of current progress, constraints, and plans for action.**

Results will be disseminated to communities via the Care Groups and reports by the CFs. As is being done with the KPC results, information on the progress of the project

will be given to the Care Groups through verbal results of the Community Facilitators to each Care Group. In order to give these verbal reports, CFs will receive the aforementioned one-page summary report. During their verbal reports to Care Groups, CFs will highlight practices that continue to be problematic (e.g., bottle feeding). CFs will also be responsible for explaining the summary report to community leaders in their area. **Communities will benefit from this data** by seeing what has already been accomplished in their communities and what remains to be done.

Curamericas' Field Manager will be making frequent trips to the capitol, and use these reports for **advocacy and fundraising in Guatemala**. The Field Manager will also forward them to the headquarters for use in Curamericas' fundraising and development education materials, and during advocacy opportunities (e.g., through CORE).

The CS Program Coordinator will report to the Curamericas Field Manager and Program Specialist (HQ) using the CS Program Coordinator's Monthly Report form. See **Annex L** for a copy.

The types of final assessments, studies or surveys that will be carried out: As was used in the baseline survey, the final KPC 2000+ RapidCATCH survey will use LQAS and parallel sampling as sampling methodologies. One questionnaire will be used for 0-11m olds and one for will be used for 12-23m olds, with sick child questions and anthropometry questions in both in order to assure an adequate sample size for those questions. Curamericas staff members are well versed in KPC 2000+ RapidCATCH and LQAS methodology. Mr. Davis with the help of other colleagues has produced a curricula and a regional workshop for the KPC 2000+ for the CORE Monitoring and Evaluation Working Group. Mary DeCoster, the Program Specialist backstopping this project, will also be trained in these survey methodologies. Data analysis for the final will be conducted electronically using Epi-Info and will include cross-tabulations of important variables. Hand tabulation – done jointly with the stakeholders – will also be done in the field of the most important (e.g., RapidCATCH) indicators. KPC data will be shared with communities, through the use of several simple PRA-type methods (e.g., tortilla [pie] charts) as is being done with the baseline KPC.

Focus Groups with mothers of young children, community leaders, and health facility staff will be conducted at midterm and in the last year of the project. These will supplement the KPC and mini-KPCs with qualitative data. This qualitative study will also help staff to learn more about any unintended results of the project, and to gain a better understanding of what changes have occurred at the community and health-facilities level, and why.

In follow-up to the **Health Facility Assessment** (HFA) that was conducted in January 2003, data on several health facility level indicators (**see Section 4. Work Plan**) will be collected every once a year throughout the project. These indicators will be used by the local health facilities to monitor and regularly report to the CS Program Coordinator. These indicators will continue to be monitored throughout the life of the project (so a final HFA will not be needed) as the health facilities make changes to their sites and

implement IMCI. An **externally-led midterm evaluation** will permit USAID and the project team to make any necessary mid-stream corrections or changes.

How the capacity of the local partner(s) will be assessed*:* Once Curamericas hires its Field Manager, a more complete and formal baseline evaluation of organizational capacity will be conducted to supplement the more rudimentary one that was done recently. (We are presently in the interviewing process for the Field Manager position.) A final evaluation of organizational capacity and development of organizational capacity indicators will be done in Guatemala in the last year of the project. Curamericas has been developing its own forms and process for this purpose. After this more formal assessment is conducted, we will choose a set of indicators (e.g., financial/sustainability, program, administration) that reflect Curamericas/Guatemala's and the MOH's organizational needs, and measure them at final.

Operations research that will be carried out in the program: No operations research will be carried out in this project, given the full load of project interventions.

Objectives, indicators, measurement methods, and major planned activities: The objectives, indicators, description of how indicators will be measured, benchmarks, and project activities are summarized in the tables in **Section 4. Work Plan**. The general objectives for this program are provided in **Section 3. Program Description by Objectives, Interventions and Activities.**

2. Summary of Baseline and Other Assessments

Types and Methodology of Baseline Assessments (Qualitative and Quantitative) & Findings of Selected Baseline Methods

Seven baseline assessment studies were conducted to plan this project:

a. **Focus Groups, Key Informant Interviews and Direct Observations**:

Focus groups were conducted in eight project communities (five Acateca and three Chuj) with mothers of children under two years of age in order to gather information on their:

- perceptions of local health facilities (including access issues);
- perceptions of principal community-level and household-level problems;
- perceptions of their and their children's principal health problems;
- practices and beliefs about the treatment of their principal health problems (and those of their children); and
- practices and beliefs about feeding behavior and other health-related practices.

Findings from these qualitative studies included:

- The principal community-level problems identified during the *Acateca* focus groups were **lack of water, lack of food, lack of latrines, and lack of health posts**. In the Chuj focus groups, **poverty and illiteracy** were the principal community-level problems mentioned.
- **Concerning health facilities, problems of access were noted** with some communities not having any nearby health facilities and some people having to travel

two to four hours to receive medical attention. Children and pregnant women were rarely taken to a hospital for care (despite the need), usually because of the cost associated with using hospitals. People had fairly positive impressions of the local health workers, but there were some complaints made about the way people were treated in the (referral) hospital in Huehuetenango.

- **Frequently mentioned illnesses of children** mentioned by parents included diarrhea and vomiting, respiratory infections, skin problems, and one supernatural cause, evil eye ("*mal de ojo*").
- **Many poor nutritional practices were identified. The Chuj are more traditional in their nutritional practices than the *Acateca***, consuming less packaged food, initiating breastfeeding early, giving liquids and foods prior to six months, and weaning at age two or three. The *Acateca* often wait until three days after birth to begin breastfeeding, giving water, sugar water, and sweetened coffee to children prior to that. They also tend to initiate feeding earlier, somewhere between birth and six months (according to the family). Facilitators were told by both groups that children were not actively fed or coaxed to eat when they were not hungry. Dietary diversity in both groups appeared to be a problem. Children from both cultural groups are usually given a gruel of beans and tortillas dissolved in water.
- **Food insecurity** was mentioned as a concern in two of the eight communities – both Acateca – where the focus groups were conducted. Key informants state that food security can be an issue for all the communities whenever there is drought or a poor harvest. On observation, many children were visibly stunted, and secondary data confirm stunting as a problem in the Huehuetenango department.
- **Chuj women**, according to key informants, and from the focus group data, **tend to help and support each other more than Acateca women.**
- **Problems with water and sanitation were found.** Most families stored drinking water in uncovered containers, and most groups indicated that had **never received hygiene education**.
- **Concerning vaccines,** all groups reported that children had received some immunizations, but **education on immunizations appeared weak**: most participants were unclear about which immunizations had been given and what diseases would be prevented. Few mothers knew about vitamin A.
- **Concerning diarrhea,** most participants said that they had **never received education on diarrhea**. Participants believed it was correct and appropriate to offer more fluids to children with diarrhea, but said that the children usually rejected the extra fluids and food because they did not feel well. (This finding was supported by the KPC – only 29% of children 0-23m with diarrhea received the same amount or more liquids during the illness.) Most treated diarrhea at home, but felt that a child needed to be taken to a health facility if the child refused to breastfeed or eat, if the child was weak, or if there was no improvement after several days. Neither group reported feeding children more after illness.
- **Concerning ARI**, participants said that children would only be taken to a health facility for treatment if they became so sick that they would not breastfeed or eat.
- **Mothers did not generally report prenatal care or postpartum care.** Facilitators were told that most births were not even attended by TBAs. No one mentioned receiving tetanus vaccinations, or any vaccinations for adults (only children). (The

KPC report found a small group – 16% – who had been immunized with TT.) The most frequently mentioned problems were **breech and transverse presentations of the fetus, causing long labors (up to a week long), and maternal hemorrhage. Mothers preferred Depo Provera** as a family planning method, saying that it was "**more private**," and that others do not have to know that they were using a family planning method. Some mothers did not tell their partners that they were using FP methods.

- Most groups complained of a **lack of information and health education**, and said that the only time they see health promoters is when they come to vaccinate their children.
- In general, the **data from the focus groups, key informant interviews, and observations supports the findings of the Health Facility Assessment and the KPC**. Practices of parents, especially nutrition practices, are problematic, and some differences exist between the two cultural groups. Even in the areas where food may at times be scarce, overall nutritional status could improve significantly if parents learned and used better feeding practices (given the poor practices identified by the KPC and qualitative methods). The Care Group model will be well suited to meeting these families learning needs in a culturally and linguistically appropriate manner, and will provide families with regular (biweekly) health education.

b. **Health Facilities Assessment**:

An HFA was conducted in the project area in March 2003 using the BASICS methodology. The group consisted of six Curamericas (Guatemala) staff members, four other health care workers, and a community representative from San Miguel Acatan. Five health workers in all five clinics and health posts in the project area were evaluated. The HFA Report is included in **Annex C**. The main findings from the HFA were:

- Only one worker had been trained in IMCI.
- **Assessment of sick children:** Only the IMCI-trained health worker evaluated children for three danger signs, weighed and measured the children, and assessed children for all diseases that are part of the IMCI protocol. Health workers who were not yet IMCI trained completed few of the assessment tasks, and rarely assessed nutritional status, immunization status, and danger signs
- **Classification:** Most health care workers were able to correctly classify the illnesses. Cases were generally simple (one illness only), so we were unsure if health workers would have correctly identified, for example, a respiratory infection in a child brought to clinic to be treated for diarrhea.
- **Counseling:** Health care workers gave the caregivers accurate but limited advice, and often omitted information on danger signs and instructions on when to return to the health facility.
- **Treatment:** Antibiotics and calmatives were appropriately prescribed in the majority of cases. Oral rehydration solution (ORS) was also appropriately prescribed, but its use was not modeled due to unavailability of ORS in the centers and health posts.
- **Referral:** In this HFA, no children were observed who required referral, so we were unable to evaluate whether appropriate referral was being practiced. Knowledge of health workers concerning when and how to refer was good, however.

- **Parental Recall**: Recall of medication instructions was mixed. Poor *Akateko* and *Chuj* language skills on the part of health providers (Spanish to) probably accounted for many of discrepancies between care providers instructions to parents and what parents were able to recall (during the exit interview). Parental recall on when to return for follow-up was also very low.
- **Health Worker Interview**: The problems of greatest concern to the health care workers included lack of regular training, insufficient personnel, problems with transportation of supplies, language barriers, lack of supervision, problems with referral and transport of patients (the nearest hospital is five hours away).
- **Site Observation**: Immunization schedules were posted in health facilities. No problems were noted in supplies. One health post lacked electricity and a refrigerator for storing vaccines and medicines. (Refrigerators and funds for electricity are currently provided in the project budget, and will be provided in the next few months.)
- **Supervision**: Health-facility workers had received an average of three supervisory visits and one training in the past 12 months (though some of the most remote sites had received no supervision and no training).

After analyzing the HFA results, high priority was given to following tasks:

- **Train staff in IMCI.** (This will be done in the next few months.)
- **Improve evaluation of danger signs** through IMCI training and ongoing evaluation and supervision. We will also encourage health facilities to post small posters (or full IMCI charts) with the danger signs in each room where examinations are done.
- **Teach danger signs to the parents and other caregivers** through Care Groups**. Develop the Spanish-*Chuj* and Spanish-*Akateko* medical phrase books early in the project.**
- Following IMCI training, **encourage staff to use the IMCI charts, growth monitoring tools, and the vaccine charts consistently**. Provide regular supervision and evaluation of this using the standard WHO IMCI checklists.
- **Prepare health workers (during IMCI training) to encourage exclusive breastfeeding for children under six months, and delayed weaning.**
- **Teach parents to properly measure and administer medication** (e.g., using sun/moon medication cards).

c. Baseline Assessment of Field Administration and Management Systems:

An assessment of field administration and management systems was conducted in the project site in Guatemala on March 23, 2003 by Mary DeCoster (Program Specialist, Curamericas). It examined field office operations and communications, office organization, personnel policies, office equipment and technology, and project-related reporting mechanisms.

Major findings from the study were:

- **Staff meetings will need to be held monthly rather than biweekly** given the hardship involved in traveling between project sites. Trainings will be scheduled to precede or follow staff meetings to reduce travel.

- **Good documentation systems are in place**: Staff meetings use a written agenda and minutes are kept. Memos, letters and reports are used. Monthly progress reports are now being sent to Curamericas.
- **Communications between Guatemala and Curamericas HQ are difficult, given the remote location of the project.** Telephone lines have been solicited at the project site, but have not yet been installed. Currently, e-mails, attached files, and packages can be regularly sent from the FUMESDER office in Quetzaltenango to the project site. These are sent on the same day to the project site via bus. The secretary in Quetzaltenango also relays verbal messages to the CS Program Coordinator on a daily basis. (He can contact the office via cell phone from certain parts of the project site.) **While inefficient, this system has been a reliable way to get information to and from the project site, and is the best option at this time.**
- **Internet access** is available at 128 kb/sec in Huehuetenango and at 56kb/sec in the FUMESDER office in Quetzaltenango (where some meetings are held). E-mails are relayed to the project site (as described above). Key project staff are competent in internet navigation and the use of email, and have e-mail accounts. The IT specialist will be teaching all staff members to use e-mail.
- **Faxing**: There is a rented fax service at a nearby office in San Miguel (near the office in the project site).
- **Other equipment**: The office has purchased an overhead project, a scanner, five computers, and five printers. A copy machine in a nearby office is used for a small fee.
- **Computer skills:** Windows XP is installed on all computers, along with Microsoft Office 97 or later. All key personnel use MS Word, Excel, Outlook, Internet Explorer, and Power Point. The CS Program Coordinator has requested additional training in MS Excel, and all staff would like to learn Epi-Info (which is included in the CS budget) and key staff will need to learn how to use Epi-Nut.
- **Contracts**: All employees have written contracts and job descriptions which are reviewed together by employee and supervisors. Employees receive training on a regular basis as they take on new tasks.
- A regular **inventory of supplies** is maintained by the IT specialist who is also responsible for all office equipment. A paper filing system exists and is kept up-to-date.
- **Reporting mechanisms and forms:** There are protocols in place and forms available and accessible in the office for reporting mileage, expense reports, and technical reports. Forms for financial reports and for statistical reports are being developed. Travel expense reporting is done with receipts. MOH reporting forms will generally be used for the health information system (HIS).

d. **Baseline Institutional Strengths Assessment**:

From January 6-10, 2003, one consultant (Karla Pearcy) and staff from CSTS (Eric Sarriott and Kathleen Mercur) led Curamericas HQ staff through an assessment of organizational capacity (which included written input from Curamericas staff members in Bolivia, Mexico, and Guatemala).

The most important findings of the ISA are provided below:

- Use of technical knowledge and skills and Human Resource management (professional growth, recruitment, and supervision) are the two stronger areas of capacity identified. The difference between the health unit and field average scores (field scores being lower than health unit) is more noticeable for the Technical area.
- Organizational Learning (learning capacity of unit staff and adjusting programs to reflect newly learned skills) and Administrative infrastructure and procedures (administrative support and availability of procedure documentation) are weaker areas of capacity. Guatemala expressed a concern in this area and their score was at variance with the HQ score. The spread in scores among field projects, however, is important for organizational learning.
- Financial management (capacity to transfer funds to the field and the availability of accurate reporting data), and is the weakest capacity area of the six, particularly as assessed by the health unit. This area is one where the health unit scores are lower than the average field score, suggesting possible differences in perspective on financial management questions.

- Management and Governance is of overarching importance that crosscuts all the others. Management plays a critical role for Curamericas at this point in its organizational development.

The main recommendations made by Curamericas in response to the ISA findings were related to:

- lessening the administrative, financial, and leadership development tasks placed on the Guatemalan team by Curamericas' head office;
- increasing and improving communication among employees through a clarification of job roles and responsibilities (particularly for those involved in the CS program) as well as through an increased frequency of information sharing among staff;
- documenting policies for administrative and managerial processes, especially for project start up that includes dissemination to the field in Spanish;
- reviewing and revising administrative procedures on more regular basis to confirm/change administrative policies; and
- training administrative and financial staff on a more continual basis.

As a result of the ISA process, Curamericas has begun to embrace several of the recommendations made by field and HQ staff including the acquisition of an adult education technical specialist; the acquisition of a volunteer program coordinator (to be located in the Guatemalan field office) to assist with the local institution's administrative, financial, and reporting processes; and an increased frequency of staff communications and opportunities for information sharing. Curamericas executive management has expressed a deep commitment to building upon the ISA's results so that field and HQ staff members are empowered to implement more effective programs.

e. Anthropometry Study:

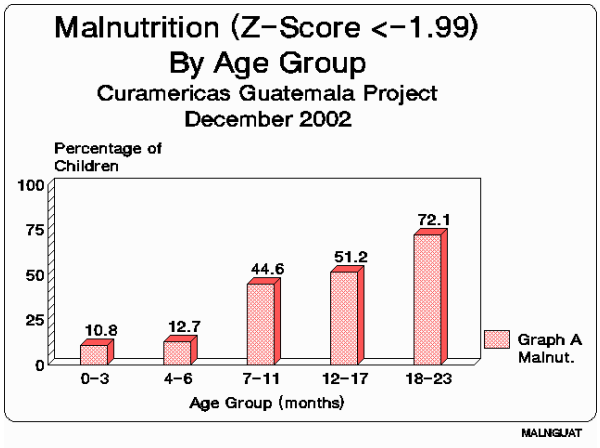
The anthropometry study included 486 children, and was done concurrently with the KPC baseline survey. **The quality of the anthropometry study and data appears**

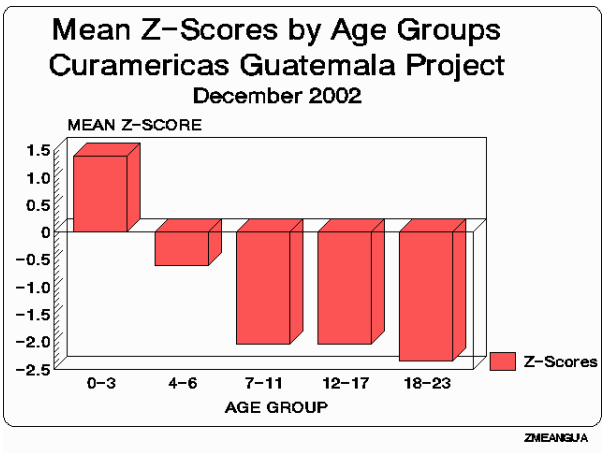
good. Training was adequate, included a practicum, and only 3% of records were flagged (by Epi-Info) for extreme values. While there was some evidence of rounding of weights, it was not to the level that it would greatly affect analysis.

The anthropometry results for this area are alarming. In the project proposal, it was mentioned that the northwest region of Guatemala has the highest indices of malnutrition in the country: 33% are moderately or severely underweight for age, and 69% are reported moderately or severely stunted. Through this anthropometry study, it was found that **43% of children 0-23m were underweight (moderately or severely), and 16% were *severely* underweight. As children leave infancy, their nutritional status worsens: 62% were moderately or severely underweight, and 19% were severely underweight.** (As a point of comparison, 16% of preschool children in *Ethiopia* were severely underweight during the 1990-1997 period [UNICEF, SOWC].) 4.2% of children 0-23m had a weight-for-age Z-score below -4.0. All children with a WAZ<-4 were in the 12-23m old age group.

There were small differences by gender (males fairing worse), but differences were not significant. 90% of children 0-23m of age and 98.8% of children 12-23m were below the third percentile, and standard prevalence was 47% among children 0-23m of age and 75% among children 12-23m of age. The median weight-for-age Z-score was -1.77 among children 0-23m of age, and -2.27 among children 12-23m of age. The mean weight-for-age Z-score was -1.53 (CI: -1.38 to -1.69) for children 0-23m of age, and -2.28 (CI: -2.16 to -2.41) among children 12-23m of age. A small amount of obesity was noted (4.6% of children 0-23m of age), all of it in infants.

Analysis of nutritional status by age group shows that the proportion of children malnourished worsens sharply after six months, and deteriorates further after 17 months. The worse drop in mean Z-score is after six months of age, as well.





f. **Census:** A census is just getting underway in the project area, but no results are available at this time. Curamericas routinely includes a retrospective mortality review in the census. Data from that will be used to further modify the schedule of contacts with beneficiaries and to identify additional activities that may need to be added to the project

plan.

g. **KPC Survey**: The baseline KPC survey was conducted in November and December 2002 with a total of 461 children 0-23 months of age. The sampling methodology used was LQAS, with parallel sampling of children 0-11m and 12-23m of age.
The questionnaires used in the Curamericas/Guatemala KPC survey drew heavily from the **KPC 2000+ and RapidCATCH questionnaires** developed by CSTS. Since **parallel sampling** was used (to assure a high number of ill children in the sample while still using the smaller-sample used with LQAS), two questionnaires were developed: one for mothers of children 0-11 months and one for mothers of children 12-23 months. The consultant, with the technical assistance of Curamericas' Senior Program Specialist (Tom Davis), designed a preliminary rough draft of the questionnaire in Spanish. Following that, the KPC Core team made **modifications to adapt it to local terminology and concepts** using information learned during the focus group process and interviews with key informants from each cultural group. During review of the questionnaire with interviewers, supervisors and the KPC Core Team, further changes were made in grammar and language. An **Events Calendar** (See **Annex B** of KPC document 10) was created for each indigenous group, which was used to assure that good dates (e.g., birthdates) were used during the interviews. An informal **Cultural Lexicon** was also used to help interviewers use standard, alternate wordings of phrases (in the questions) when the wording of the questionnaire was not understandable to some interviewees (e.g.., "*asientos*" was used if the mother did not understand "*diarrea*.") All of this took place with the **participation of Curamericas, FUMESDER, the MOH, and community representatives (the interviewers)**.

The questionnaire was **translated into Acateca and Qanjobal**. To ensure accurate translation, it was simultaneous – two different people did the translation (without communicating with each other) and those two results were compared to put together a final version. No translation in the Chuj language was done, because very few people understand and are able to read and write in Chuj. (Even if a written translation would have been done by a professional, few if any interviewers would have been able to read it.) The surveyors of the KPC team who worked in Chuj communities thoroughly prepared together the verbal translation of the questions that they would use with the Chuj.

Thirteen interviewers pretested the questionnaires in order to obtain information on how the questionnaire would be received, and to practice interviewing skills. Final adjustments were made to the questionnaire following this process.

Both versions of the questionnaire (0-11m and 12-23m) had an introductory section which helped the surveyor choose which questionnaire to use in which household (based on the rules established during the KPC planning process) for parallel sampling. Questionnaires also included a **consent form** on the first page with identifying information which could be removed after the survey.

The 0-11m questionnaire had 84 individual questions and covered the following topics:

- identifying information (including mother's community and identifying information about the child, ten questions);
- water and sanitation (two questions);
- information about the interviewee and the household (8 questions);
- breastfeeding, nutrition and micronutrients (12 questions);
- growth monitoring (two questions);
- sick child care (two questions);
- diarrhea (five questions);
- ARI (11 questions)
- care for pregnant women (ten questions);
- birth and care for the newborn (three questions);
- postnatal care (five questions);
- birth spacing (eight questions);
- knowledge about HIV/AIDS (three questions);
- previous health education (one question); and
- anthropometry (two data fields).

There were a total of 64 questions in the 12-23m questionnaire. The topics covered in that questionnaire included:

- identifying information (including mother's community and identifying information about the child, ten questions);
- water and sanitation (two questions);
- information about the interviewee and the household (eight questions);
- breastfeeding, nutrition and micronutrients (eight questions);
- growth monitoring (two questions);
- vaccination (two questions with multiple parts);
- sick child care (two questions);
- diarrhea (five questions);
- ARI (11 questions)
- birth spacing (eight questions);
- knowledge about HIV/AIDS (three questions);
- previous health education (one question); and
- anthropometry (two data fields).

Interviews did not exceed 40 minutes for either of the two questionnaires.

The KPC training (not including the practicum) took place from December 12-15 at the Curamericas office (adjacent to a MOH health center) in San Miguel Acatan. The consultant had been previously trained in the **KPC 2000+ Training of Survey Trainers for PVOs** (sponsored by Curamericas in June 2002). The **curriculum** used was based on the *KPC 2000+ Training of Survey Trainer* which draws heavily from CSTS' *KPC Field Guide*.

Several challenges faced during the KPC were:

- **Distances between the base and some project communities are long, and travel between communities was difficult**, given the mountainous terrain. Only two motorcycles and two cars (a van and a small bus) were used to transport the interviewers and the supervisors. This led to some delays in picking up some of the interviewers and supervisors during the first day, but was then corrected.
- Project staff had worked with local leaders to prepare maps prior to the KPC, but **maps were not available for some communities**.
- **Communication with community leaders prior to the KPC could have been better**. Not all leaders knew about the KPC.
- **Working across several language groups was a challenge.** It was impossible to use a written questionnaire in Chuj (for reasons cited above), which probably meant that some questions may not have been asked the same way in all interviews (despite our efforts to minimize that occurrence). It was also difficult for Supervisors to monitor the quality of some of the interviews since, in general, supervisor speak the local languages (Chuj and Acateca) with less fluency.
- Another challenge (although minimal) was that **some of the scales used to weigh children were in kilos and were others in pounds**. Scales were divided so that the interviewers from the same jurisdiction used scales with the same weight unit. All weights were later converted to kilos.

The **quality of the KPC process** was assured through high-quality training (including lots of practice sessions), proper selection of interviewers and supervisors, and the use of a KPC QIV checklist (see Annex 6 of the KPC document). All quality problems identified were minor.

In order to monitor the possibility of selection bias, a form was filled out to record when an interview was not completed (see KPC Annex 5, Form to Record Interviewees Not Found). The use of an **all-female team of interviewers and supervisors** should have reduced the reluctance that area women have in talking to strangers – especially male strangers – about some health matters. Mothers felt more at ease in expressing themselves more honestly and fully with female interviewers.

Data was tabulated manually using LQAS tabulation forms. Paper LQAS tabulation forms were then entered into an Excel spreadsheet that summed the results of the Supervision Areas to give point estimates of coverage, and also allows the user to identify Supervision Areas that are below average coverage (by applying decision rules). In general, indicator levels were low. Where they were very high (relative to the final target), we evaluated whether the final (target) indicator level had been achieved in each supervision area After entering all of the data onto the LQAS tabulation forms, **10% of the questionnaires were chosen at random to ensure quality of data entry**. If errors were found for a particular tabulator during this check, all the tabulator's questionnaires were checked for accuracy.

The findings of the KPC survey are presented below.

SUMMARY OF THE KPC FINDINGS AND ACTION PLAN BASED ON FINDINGS
The following section gives the main findings of the KPC survey along with recommendations on how the research will be used to contribute to the change of practices and behaviors during this project.

Summary of Findings and Action Plan, Maternal and Newborn Care:

- **Knowledge of danger signs during the postpartum period – both for the mother and child – was particularly low.** Only 5% of mothers could cite two or more signs of danger in newborns, and only 2% were able to cite two or more maternal danger signs during the postnatal period.
- **Only 9% of the births of mothers of infants were attended by skilled health personnel**, which is very similar to the 9.9% level of *institutional* births found for the entire northwest region of Guatemala [DHS, '98/99].
- 20% of mothers of infants had at least two prenatal controls by a qualified health worker during their last pregnancy. For the entire northwest region, 38% of women (the lowest in the country) received prenatal care from a physician or nurse during their last pregnancy.
- 33% of mothers of infants took iron supplements during their last pregnancy. No regional data was found on this indicator, but this level was higher than the 5% level found in a smaller KPC conducted in one of the project districts (San Sebastian Coatán) in November 2000.
- Only 23% of mothers of infants had a postnatal check-up.
- Over half (52%) of mothers of infants said that they had eaten *less* than usual during their last pregnancy. (This was similar to the 55% found in the 2000 KPC in San Sebastian Coatán. No regional data was found for this indicator.)
- Given the low proportion of institutional births and the very low knowledge levels of danger signs, the **training of TBAs will focus on proper referral, preparation of birth plans, education on danger signs, and the importance of prenatal and postpartum visits**. Danger signs will be taught during Care Group meetings, as well (and subsequently taught to all women in the project area).

Summary of Findings and Recommendations, Nutrition:
Some of the worst nutritional practices and situations identified by the KPC survey were:

- **44% of infants and 57% of children 12-23m are bottle fed;**
- **lack of immediate breastfeeding (only 21% breastfeed in the first hour after birth);**
- **no mothers received vitamin A during the postpartum period, and only 28% of children 12-23m had received a dose of vitamin A (based on card; 36% based on mother's report) ;**
- **only 38% of children 12-23m were encouraged to eat when they were not hungry (which is particularly problematic given the high number of malnourished children who may be anorexic, as well); and**
- **only 22% of children 0-23m had been weighed in the past four months.**

Other nutritional practices and situations of concern include:

- only 45% of children 6-9m receive complimentary feedings;
- only 63% of children 0-5m are exclusively breastfed;
- Consumption of protein-rich foods (66%), green leafy vegetables (43%), and fruits (23%) among children 12-23m of age are not particularly high.
- Persistent breastfeeding of children 20-23m of age was decent (71%), but could be improved during the project.

Action Plan based on these findings:

- **Food security will be further studied** in the project area, possibly by including questions on food security (currently under development by CORE) in the annual mini-KPCs, and Curamericas will contact and attempt to coordinate with other organizations that are working on food security in Guatemala.
- **The KPC data set will be computerized in order to look for associations** based on cultural group, mother's age (e.g., younger vs. older mothers), nutritional status (e.g., two by two tables examining specific nutritional practices and their correlation with nutritional status), mother's educational level, number of preschool children in the household, etc.
- **Project staff will convince community outreach staff and community leaders/ members of the importance of high coverage with vitamin A supplements** as a way to decrease child deaths in the project area.
- **High-quality growth monitoring** will be given attention since very little is being done presently.
- **More overall level-of-effort will be given to improving nutrition in this project,** given the very poor nutritional status and its effect on child mortality.
- **An anti-bottle feeding campaign** will be waged and **barriers to exclusive breastfeeding will be studied using barrier analysis**.
- The CS Program Coordinator will assure that clinic staff are adequately trained in the **management of children with severe malnutrition** (including the WHO 10 Steps for the care of severely malnourished children[4], and guidance on delaying iron supplementation) and how to educate parents on **preparation of Hearth-type meals**. Home-based therapeutic care will be considered. It HBTC is included, matching funds will be used for those activities.
- Attention will be given to **improving immediate breastfeeding** (e.g., working with TBAs), **encouraging children to eat** despite their level of appetite, initiating **complementary feeding** at six months, increasing usage of **iodized salt**, and **improving the diversity of the diet** (especially in regards to micronutrient-rich foods).
- **Care Groups will be used to teach PD practices and to teach mothers how to make Hearth meals** (e.g., using the Nutrient Blocks exercise discussed during the recent CORE Hearth TAG).

[4] See http://web.uct.ac.za/depts/chu/mch10j.rtf for the 10 steps.

Summary of Findings and Recommendations, Child Spacing:
The current level of use of family planning methods is much higher than originally anticipated in the project proposal (21% vs. 6%). However, there are still many mothers (59%) who do not know where they can get materials and information on methods for child spacing. Also, a significant portion (52%) of children 0-23m of age are born within two years of their older sibling. It is recommended that the project staff:

- Adequate messages will be included in educational materials on the **location and price of family planning methods** (e.g., in the Care Group and other educational materials).
- **The overall level of effort given to child spacing activities will be decreased in order to make room for more level of effort dedicated to malnutrition.**

Summary of Findings and Recommendations, IMCI:
Very little health promotion is currently occurring in the project area – only 9% of mothers had participated in a health talk in the past three months, and only 21% of mothers could name two or more danger signs during illness.

Action Plan based on these findings:

- When Care Groups first begin meeting (in June 2003), **recognition of danger signs related to childhood illness and proper care seeking behavior will be emphasized in the educational sessions**.
- Barriers to education on danger signs during illness included the medical staff limited knowledge and fluency in local languages (e.g., Chuj). In order to reduce this barrier, the **project staff will begin development of the Chuj and Akateko medical phrase books within the next few months.**

Summary of Findings and Recommendations, Pneumonia:
Care seeking for children 0-23m with cough and rapid/difficult breathing was poor at 29%, and was worse among infants (14%). Feeding during respiratory illness was also poor: Only 31% of children 12-23m received the same amount or more liquids when they had a cough and rapid/difficult breathing, and only 16% received the same amount or more food.

Action Plan based on these findings:

- **Prompt care seeking and feeding during illness will be emphasized in the Care Group and other educational materials**.
- All health workers will be given IMCI training. Training in clinical IMCI will most likely begin next month (May 2003).

Summary of Findings and Recommendations, Diarrhea:
Over half of the children in the study (52%) had diarrhea during the previous two-week period, and only 18% of mothers used ORS and home-available fluids (HAFs). 71% of the children received *less* liquid during a recent diarrheal episode. Only 21% of children under two received the same amount or more food during the diarrheal episode. One of the largest sources of the diarrhea may be bottle feeding: 44% of infants and 57% of children 12-23m were bottle-fed.

Action Plan based on these findings:

- **An anti-bottle feeding campaign** will be waged (see nutrition section).
- **Increased use of HAFs and ORS for children with diarrhea will be heavily promoted through the Care Groups**, including demonstrations on how to prepare and administer ORS.
- **Health staff will begin demonstrations of preparation and administration of ORS** for parents of children with diarrhea during clinic visits.
- **Project staff will assure that all health facilities, Institutional Facilitators, and Community Facilitators have a reliable stock of ORS packets**.
- **Educators (CFs and Ifs) will assure that all mothers can identify signs of dehydration, and this will be included in Care Group educational materials.**
- Given the high prevalence of severe underweight, **all health facility workers will be taught to dilute ORS for children with kwashiorkor** (following guidance in the new WHO manual[5] on management of severe malnutrition).

Summary of Findings and Recommendations, Water and Sanitation:
Hand washing was somewhat higher than expected, but still poor. Only 34% of mothers of children 0-23m mentioned at least two of the four times when they should wash their hands.

Action Plan: Hand washing and other hygienic practices should be included in the Care Group curricula.

Summary of Findings and Recommendations, Immunizations:
The fully immunized rate of children 12-23m was higher than expected (in the proposal) at 42%. Several supervision area (SM1, SM5, and SM6) were significantly below the average coverage for the project area. One supervision areas (SM2) has already met or exceeded the objectives stated in the proposal (75% coverage), and C4 may have, as well. Only 16% of mothers were immunized with at least two doses of TT.

Action Plan: The extension of services through the planned deployment of project staff should significantly increase immunization coverage. Education on the immunization schedule and the importance of vaccines will be included in educational materials.

Summary of Findings and Recommendations, HIV/AIDs:
Questions on HIV/AIDS were included in the KPC as part of the RapidCATCH. About half of mothers had heard of AIDS, but only one-third believed that it could be prevented. Fewer yet (3%) were able to cite at least two ways to prevent HIV infection.

Action Plan: While HIV/AIDS is not a project intervention, **messages on HIV/AIDS could easily be added to the Care Group curricula late in the project**.

[5] See http://www.who.int/nut/documents/manage_severe_malnutrition_eng.pdf

Summary of Findings by Supervision Area:
A table near the end of the KPC Report shows which supervision area fared better and worse for each indicator. **Supervision areas that fared the best were SM2, SM3, SM4, C3, SR1, and SR3. Supervision areas with the fared the poorest were SM5, SM6, C1, and SR2. SM5 had the worst performance overall. SM5 scored significantly below average coverage for 24 (59%) of the 41 indicators assessed above.** It appears that the main reason for such poor performance in SM5 is that that jurisdiction (*Cheche*) is the most isolated of all supervision areas. The first road into the area was constructed six months ago, and that road only reaches several of the communities in the area. Given that the presence of roads appears to be strongly related to many of our project indicators, we will share the LQAS data from this study – and use it ourselves – to advocate for more government construction of roads in the area.

Intervention areas that may have the poorest equity were calculated (using Ls per indicator). The intervention areas that probably have the **poorest equity were HIV/AIDS, EPI, and Maternal and newborn care.** Areas with the **best equity were Water and sanitation, child spacing, and IMCI/Diarrhea/Pneumonia**. This information has been given to the local project staff working in each supervision area so that each supervisor will know the weak areas of his or her supervision areas, and so that the CS Program Coordinator can direct resources appropriately among the supervision areas.

U5MR, IMR, NNMR, MMR, AND DISEASE SURVEILLANCE DATA
Guatemala's under-five mortality rate is 59[6], the infant mortality rate is 45, and the neonatal mortality rate is 23 per 1,000 live births. For the northwest region where the project is located, **the IMR is reported to be 50 and the neonatal MR is 23**. The **U5MR is 71** for this region, making it the second highest in the country. The maternal mortality rate is calculated each year by the MOH for the project area. **In 2000, the average MMR for the three municipalities was 486 (cf: 190 for Huehuetenango in the DHS[7]).** Based on a study conducted by FUMESDER with the MOH, it is clear that common causes of maternal deaths in the project area include hemorrhage, sepsis, pre-eclampsia, and eclampsia.
Health data for the three municipalities[8] show diarrhea and ARIs as the most common childhood illnesses. Health professionals contacted by Curamericas in the project area indicated that pneumonia, perinatal problems, diarrheal diseases, and malnutrition are the leading causes of child deaths, although there is currently no reliable mortality data nor data on the leading causes of child deaths for the three project municipalities. (Curamericas will establish a system to collect this data). Given the remoteness of many communities, the paucity of health facilities, and the low proportion of mothers who take their children for care when they are ill, it is expected that any disease surveillance data in the project area is plagued with incomplete reporting.

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6 *Encuesta Nacional de Salud Materno Infantil* 1998-99 (DHS).
7 State of the World's Children Report, 2000 (UNICEF)
8 *Boletín Epidemiológico, Primer Semestre de 2001, Departamento de Huehuetenango*, Guatemala MOH.

Future and On-going Data Collection and Action Plans

Through discussions with C/G CSPC and the MOH representatives, Curamericas learned that the first contact for a sick individual is a family member or a traditional healer in the community. These traditional healers have no formal training but have received their knowledge from one of their parents or another healer in the community. Healers use locally available herbs to treat most patients and, in fact, most of the herbs serve a variety of purposes, according to the CSPC. Curamericas does not have any formal local data on the practices and has not been able to find the data from other sources. As such, during the second half of the first year Curamericas will conduct qualitative data analysis of the local practices of the traditional healers and use focus groups of caretakers in the area to better understand the use of traditional healers and understand barriers to health care. Once these barriers are understood, Curamericas Program Specialist and the C/G health workers will develop an action plan to improve the practices of the traditional healers.

More information must be collected on the practices of local drug vendors in the area. Curamericas knows that antibiotics are routinely bought by people in the project area though the local pharmacies, which are regulated, or though unlicensed vendors on market days. A strong barrier to changing their behaviors, program staff believe, is that these sellers rely on selling these drugs for profit and livelihood, therefore their resistance to change is expected to be great. Craig Boynton, Curamericas Country Program Manager, has requested more information on the practices of unlicensed vendors from Edward Scholl at the USAID/Guatemala mission. Mary DeCoster will reference materials on the subject, and develop a strategy to train and educate local pharmacists and rural vendors.

Barrier analysis will be conducted during the course of the project to identify what blocks mothers, caretakers, health providers, and local drug vendors from taking preventative and/or corrective action. Barrier analysis is a rapid qualitative study that is used to better refine our educational messages and improving the practices at different levels. This methodology will be taught to the program staff during year two of the program during a two-day workshop by Mary DeCoster. Based on the results, a project action plan and key messages developed.

3. Program Description by Objectives, Interventions and Activities

Project's Goals and Objectives

The Overall Program Goal is to significantly improve the health and nutrition of preschool children and women of reproductive age, with a focus on decreasing perinatal, infant, and maternal mortality, in the rural communities and town centers of the *San Rafael de la Independencia*, *San Miguel Acatán*, and *San Sebastian Coatán* municipalities through improvements in health care and health promotion access, quality, and coverage.

The general objectives for this program are the following:

- Improve the scope and quality of preventive and curative care provided to children and pregnant women through household visits, outreach, and improved facility-based care.
- Improve the prevention of childhood illness in the home, as well as home recognition, treatment and care-seeking for illness when it occurs.

These objectives are consistent with USAID CSHGPs Strategic Support Objectives and the following Intermediate Results: (1) IR1: Increased quality of child and maternal health, and nutrition and infectious disease programs implemented by PVOs and their local partners. IR2: Increased sustainability of child and maternal health and nutrition and infectious disease programs/interventions initiated by PVOs and their partners, and IR3: Child and maternal health and nutrition and infections disease program strategies, tools and approaches developed/adapted, tested and applied. USAID/Guatemala activities have been focused on seven departments of the western highland region, including *Huehuetenango*, at the request of the MOH.

A list of all project objectives, indicators, targets, and major activities are included in Section 4. Work Plan. A project activities timeline (outlines the planned activities over the length of the project) is included in **Annex F**.

Program Approach and Strategies

The overall program approach for this project has not changed. The project will use three strategies to improve the quality of care provided to the populations and strategy Specific activities have been modified and described in their respective sections. This project proposes to employ four principle approaches in order to address the principle interventions in both geographic areas.

a. Census-Based, Impact-Oriented Methodology

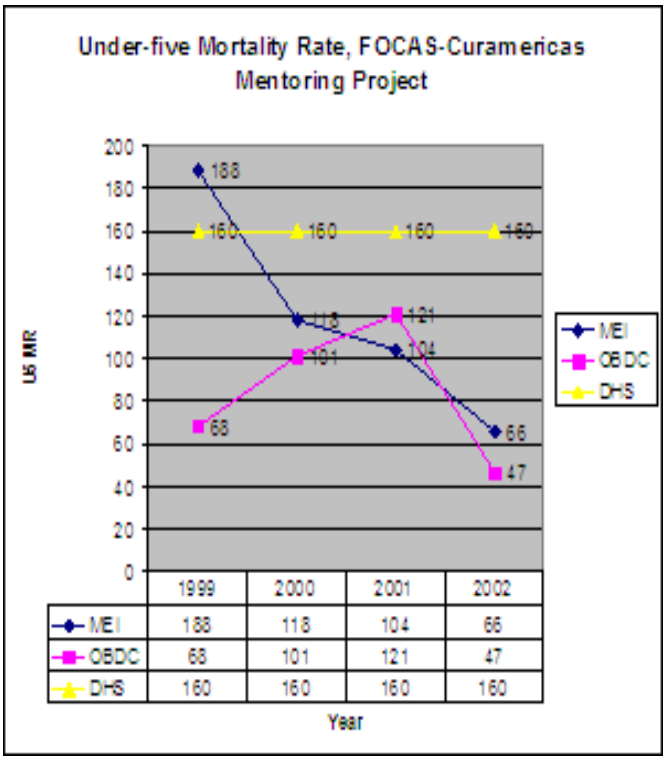
Curamericas carries out its work by utilizing a methodology called the Census-Based, Impact-Oriented (CBIO) approach to primary health care. The CBIO approach, developed by Curamericas, involves: conducting a census and health assessment of the project area; drawing maps and numbering households; developing a program plan with community members that includes both epidemiologically-driven health objectives, as well as community perceived health priorities; making targeted home visits in the service area by community health workers hired to serve their own communities; the use of a health information system that allows program staff to track service delivery and vital events by household; and multiple locations for service delivery[9].

Curamericas' CBIO methodology will be fully utilized in Guatemala, although certain key elements of it (e.g., using a community map and census) are currently being promoted and used by the MOH. With Curamericas' assistance, the project began using

[9] Perry, Henry. Attaining Health for All through Community Partnerships. Principles of the Census-based, Impact-oriented (CBIO) Approach to Primary Health CARE Developed in Bolivia, South America. Social Science and Medicine 48: 1053-67, 1999.

some key elements of the approach in their present project area. Curamericas will work together with the C/G field staff to build their technical capacity in the CBIO methodology. The CBIO methodology calls for the ongoing contact of mid-level health program staff and volunteers with the communities that they serve through clinic services, group education activities, and regularly scheduled home visits to pregnant and postpartum women, and children under five years of age. Communities will be systematically censused, with assistance of community members, and regular home visits and health outreach posts (*Jornadas*) begun on a regular basis thereafter. In the first two years of the project, the rural areas of the three municipalities will be censused and mapped. In the third year of the project, the remaining areas closer to the municipal centers (where population density is greater) will be censused and mapped, and project activities will begin there. The CBIO methodology will run parallel to existing MOH Health Information Systems. Some of the CBIO forms (vital events forms) provide more in depth data on maternal and child deaths, including care seeking behaviors, and causes of delays in seeking/receiving care.

Curamericas will use this data to do an initial analysis of the pattern of childhood and maternal deaths in the project communities, realizing that this will need to be updated as more reliable, prospective data is collected during the life of the project. Analysis of this data will allow Curamericas to make changes in the pattern of its contact with children and its interventions where necessary. Curamericas will also mentor C/G and the other partners in how to use child and women registries to keep track of essential health data at the community level, and how to identify beneficiaries who need a home visit.



An analysis in 1998 found that the under-five mortality rate decreased by almost 75% in our service areas in Bolivia during the previous eight years, due in part to our CBIO methodology[10]. From 1999 to 2002, mortality decreased 65% and 31% in the two project areas of our CS mentoring project in Haiti using the CBIO methodology.

b. Integrated Management of Childhood Illnesses (IMCI) and Community IMCI

Very little health promotion is currently occurring in the project area – only 9% of mothers had participated in a health talk in the past three months. This proportion should increase dramatically with the use of Care Groups (as planned in the proposal). When Care Groups first begin meeting, recognition of danger signs related to childhood illness and proper care seeking behavior should be emphasized in the educational sessions. Most of the health workers evaluated in the Health Facility Assessment (HFA) did not evaluate for IMCI danger signs (since all but one had not been trained in IMCI), but the HFA team gave highest priority to improving this practice and educating parent on the danger signs. One barrier to that was language. In order to reduce this barrier, the project staff should begin development of the Chuj and Akateko medical phrase books early on, preferably within the next six months**.**

IMCI and C-IMCI strategies will be integrated into the child survival activities of this project. Currently three MOH staff members in the district have received training in IMCI by the MOH. The MOH plan is for each health district to have one trained physician or nurse in IMCI who is then responsible for replicating the training within their respective health districts. The MOH has revised the WHO IMCI training to a five-day course, which includes three days of classroom instruction and two days of clinical practice. Clinical practice is provided through a combination of real patients and simulated exercises. The established MOH training materials were developed with the technical assistance of various organizations including but not limited to Save the Children, APROFAM, CARE Guatemala, Catholic Relief Services, PAHO, and Project HOPE and have been utilized in training health staff throughout Guatemala. In the Department of Huehuetenango the training is held at the Hospital Nacional de Huehuetenango. The five training modules are:

- Evaluation and classification of children from two months to five years of age;
- Treatment of sick children from two months to five years of age;
- Evaluation, classification, and treatment of children one week to two months of age;
- Counseling to the mother or caretaker; and,
- Consulting for reevaluation and follow-up.[11]

C-IMCI training in the country is also of five days duration and follows the format and modules of clinical IMCI training. Practice is provided through simulated exercises during the training.

[10] Shanklin, D. Dramatic Reductions of Childhood Mortality in Three Bolivian Child Survival Projects. PVO High Impact Symposium, Washington, DC, June 21-23, 1998.

[11] Atención Integrada a las Enfermedades Prevalentes de la Infancia; Modules 1-5; Ministerio de Salud Publica. Guatemala, June 2001.

The project will link training activities with these MOH trainings that will be held in Huehuetenango. The first training in C-IMCI is scheduled for April 2003. As mentioned in the previous paragraph, the MOH invites one or two physicians or nurses from the districts to these trainings. C/G will send one IF and a Community Educator to the IMCI and C-IMCI training who then will be responsible for training the remaining project staff in the field using the MOH training materials. C/G recommends sending a Community Educator since she will be responsible for coordinating training activities and providing community education during Care Groups. ADs, ANs, and IFs will receive training in clinical IMCI, while IFs will also receive training in C-IMCI. Although the training content of IMCI and C-IMCI is similar, it is important that the IFs are familiar with the C-IMCI protocols in order to supervise the other field staff responsible for implementing the activities and for this reason they are trained in both protocols. CFs will be trained in C-IMCI by the IFs and Educators in San Miguel Acatán. Follow up activities will take place following the WHO methodology and will use the WHO IMCI checklists to assess the level of knowledge retention and the need for refresher training.

c. Provision of Health Services in Rural Areas

Villages from the three municipalities will be phased in over the course of the first three years of the project. The project will implement the project in areas that are furthest from a health center and that have not had a strong health presence in the past. Project villages closer to the municipal centers will gradually be added over the course of the following years, with the municipal centers being the last to receive full project activities. These activities include community censuses and mapping, and community-based child survival intervention activities. It is important to note that all of the communities will receive the principal child survival activities including vaccinations, growth monitoring, deworming, micronutrients, and maternal and neonatal care during the life of the project, but other activities such as training of Health Volunteers and TBAs, intensive education through Care Groups, and monthly community health meetings will not be implemented as the villages are incorporated into the project.

In October 2002, the first two jurisdictions (twenty-eight villages, or aldeas) in San Miguel Acatán and San Sebastian Coatán were identified and project activities commenced. Eleven more aldeas (three jurisdictions) from these municipalities will be added in October 2003, and in October 2004 the remaining jurisdictions will receive program activities. The Association for Integrated Development (ASSDI), a Catholic NGO, service area will be integrated into the program and will receive training in all of the program interventions.

As the project expands into the other jurisdictions the project will add more staff to meet the increased number of communities and demand. In year one, the project will have six IFs, adding one IF in year two and four in year three of the project. Ten CFs will be hired in year one, ten more in year two and seven in year three. Additional field staff includes two Educational Coordinators directly funded by the program, one who speaks Akateko and the other a Chuj speaker, and a Community Organizer responsible for coordinating community activities. The Educational Coordinators are responsible for providing

individual and group education to caretakers in the villages as well as coordinate and train the Community Facilitators in selected topics.

The project will be staffed in a manner recommended by the MOH and their *Integral de Atención en Salud* (SIAS) model. The MOH will provide Ambulatory Doctors/Nurses *(*AD, *Medico Ambulatorio)* who work in the health centers. This physician's role is to see patients, provide prenatal controls and deliveries (in cases of emergency), treat and teach prevention of all childhood diseases, provide emergency attention, and train TBAs. S/he also supports, trains, and supervises the Institutional Facilitators. In our project, the Educational Coordinators support the physician in his role of training and supervising the Institutional Facilitators. The three Ambulatory Doctors directly involved in this project will be supervised monthly by the CSP Coordinator, or by the MOH District Doctor in the District where one exists (San Miguel).

The project will link training activities with these MOH trainings that will be held in Huehuetenango. The first training in C-IMCI is scheduled for April 2003. As mentioned in the previous paragraph, the MOH invites one or two physicians or nurses from the districts to these trainings. C/G will send one IF and a Community Educator to the IMCI and C-IMCI training who then will be responsible for training the remaining project staff in the field using the MOH training materials. C/G recommends sending an Community Educator since she will be responsible for coordinating training activities and providing community education during Care Groups. ADs, ANs, and IFs will receive training in clinical IMCI, while IFs will also receive training in C-IMCI. Although the training content of IMCI and C-IMCI is similar, it is important that the IFs are familiar with the C-IMCI protocols in order to supervise the other field staff responsible for implementing the activities and for this reason they are trained in both protocols. CFs will be trained in C-IMCI by the IFs and Educators in San Miguel Acatán. Follow up activities will take place following the WHO methodology and will use the WHO IMCI checklists to assess the level of knowledge retention and the need for refresher training.

Supervision

The chain of supervision is as follows:

- The **Program Specialist** (Mary DeCoster, MPH) is supervised by the Senior Program Specialist (Tom Davis, MPH)
- The **CS Program Coordinator** (Dr. Mario Valdez) is supervised by Curamericas Program Specialist through site visits several times a year, and daily e-mail contact, and occasional phone calls.
- The three **Ambulatory Doctors** directly involved in this project will be supervised monthly by the CS Program Coordinator, jointly with the MOH District Doctor where one exists (San Miguel). The MOH District Doctor in San Miguel will be trained in IMCI during the upcoming IMCI training. Their supervision will be based on SCM guidelines which are part of IMCI, using IMCI checklists which have already been developed for Guatemala. At this point, the MOH has resources to do some supervision, but not as much as is necessary. The HFA found that MOH staff had received an average of three supervisory visits and one training in the past 12 months (though some of the most remote sites had received no supervision and no training).

- The **Institutional Facilitators** (IFs) are supported, supervised, and (to some degree) trained in the clinical aspects of their work by the Ambulatory Doctors/Nurses, using the SCM guidelines that are part of IMCI. The lead Educational Coordinator will support the physician in his role of training and supervising of the Institutional Facilitators, and will do some direct observation and feedback of the educational aspects of the Institutional Facilitators' work, reporting all findings to the Ambulatory Doctors.
- The **Community Facilitators** (CFs) are supported, supervised, and trained by the Institutional Facilitators. Their supervision will be based on SCM guidelines which are part of IMCI.
- The **TBA**s are supported, supervised, and trained in the technical aspects of their work by the Ambulatory Doctors/Nurses. The lead Educational Coordinator will support the physician in his role of training and supervising of the TBAs, as well, and will do some direct observation and feedback of the educational aspects of the TBAs' work, reporting all findings to the Ambulatory Doctors. TBAs will also be supervised by these workers by observing their skills as they assist with deliveries (to which they are invited) in the health centers.
- **Health VolunteersVolunteers (Communicators)** HVwill be supervised by the CFs through observation of their educational skills during the demonstration and practice sessions which are a regular part of the Care Group meetings, as well as occasionally accompanying them on home visits.
- **The Program Administrator, HIS Specialist, Education Coordinators, Secretary, and Community Organizer** will be supervised by the CS Program Coordinator (who will share office space with them). (The CS Program Coordinator will also assist the lead Education Coordinator with some aspects of the supervision of the IFs. There are two Education Coordinators – one for each cultural group, given similar titles for the sake of equity, but the more experienced Education Coordinator will be consider the *lead* EC.)

Since supervision will be done jointly by the CS Program Coordinator and the MOH District Doctor (in the district that has a district doctor), if Curamericas has a vehicle (one is being sought), it will be shared with the MOH district doctor for supervision. Time and per diems will be covered by the MOH. In the long run, we may be able to secure a motorcycle for use by the District Doctor (using matching funds) so that the District Doctor will be able to use this for continued supervision once the project has ended.

Curamericas' existing supervisory Quality Improvement and Verification (QIV) Checklists are being modified for this project, and a supervisory protocol is under development. Supervision will include observation of practice and problem-solving, and continuing education activities and program planning are linked to the results of the supervisory process. See **Annex H** for an example of a QIV checklist. Information from the HFA will be used to plan and modify the content of their trainings, and indicators from the HFA have been selected for ongoing monitoring of improved performance. QI checklists have been developed by Curamericas and will be used to assess and improve health worker performance in the following key processes:

- Group education sessions (e.g., Care Group sessions and groups session in health facilities);
- one-on-one counseling;
- growth monitoring/promotion,
- IMCI (we will use the WHO checklist for this one);
- Immunization, vitamin A supplementation, deworming, and iron supplementation;
- conducting training sessions;
- family planning counseling;
- use of nonformal education methods (songs/poems, stories, and testimonies);
- interviewing during annual surveys; and
- management of severe malnutrition (under development).

We will also consider using some of JHPIEGO's QI checklists. A checklists for assessing and improving the use of these checklists has also been developed and tested, and will be used in this project. These checklists were used in our highly-successful Haiti mentoring project and are now in Spanish (except for the FP counseling checklist, which will be translated). We consider part of the success of the checklists in improving quality to be the extensive and supportive (i.e., encouraging) feedback given to health workers. The training in QIVCLs is designed to give the supervisors skills in using the checklists and providing nonthreatening, supportive feedback, but also to change their attitudes concerning their relationship the workers with which they work (towards that of being a mentor rather than an enforcer of policy).

In general, the quality indicators that will be used are internal indicators – not reported to USAID. As part of our use of indicators, an indicator threshold (usually 90% or more) is set for each of the key processes. Following a training (e.g., in growth monitoring/promotion), the key process is observed by a supervisor repeatedly (e.g., once every two weeks for several months) until the health workers score reaches the threshold. At that point, the checklist is used on a less frequent basis (e.g., every 6-12 months) to assure that the level of quality remains high, and a checklist on a different process (e.g., vitamin A supplementation) is used. (We found this process to be very useful and manageable in our successful mentoring project in Haiti.)

The WHO IMCI checklists, based on SCM guidelines, will be used to monitor and improve the quality of IFs, and CFs use of the IMCI protocols. The IFs will receive training in both C-IMCI (so that they can supervise the CFs) and clinical IMCI (so that they can fully manage children with illnesses) that they see during the monthly health outreach posts that they will conduct.

Program's Approach to Behavior Change for Individuals, Families, Communities, and Health Workers

Both Mary Decsoter, MPH (Curamericas' Program Specialist) and Tom Davis, MPH (Curamericas' Senior Program Specialist) have an MPH with an emphasis in health education, and will be directly involved in the production of the participatory education modules that will be used by the Health VolunteersHealth Volunteers (Comunicadoras) to educate mothers. All educational materials developed will be pretested and revised (if

necessary) prior to final usage. 92% of the women in the project area are functionally illiterate. Given that, the flipcharts used by the Health VolunteersHealth Volunteers will be **mostly pictorial** with only a few short words included (e.g., the names of vaccines). (The Health VolunteersHealth Volunteers are the women who make up the Care groups and will each educate a set of 12-20 women – see page 66 for a detailed description of Care Groups.) The project staff will be using an electronic camera to take pictures of local women practicing the promoted (and discouraged, like bottle feeding) behaviors. These are the pictures that will be used in the Care Group flipcharts.

Development of BCC Materials and Messages for Individual, Families, and Communities:

Curamerica's approach to behavior change begins with the list of promoted behaviors found in proposal that was gleaned from Guatemalan MOH materials and the international CS literature. These messages are now being refined using ethnographic/qualitative and quantitative data gathered during the baseline assessments (including data from the **KPC, HFA, focus groups, and key informant interviews -- See Section E.2 Summary of Baseline and Other Assessments**). The Care Group modules are being developed one-by-one between May 2003 and May 2004. **During the development of each Care Group module** (when key messages are put into a curriculum), Curamericas will gather any other available qualitative/ethnographic data from national organizations. We will also use **Barrier Analysis**, a rapid qualitative tool, to determine barriers to behavior change through a quick assessment of current perceptions of mothers and other care providers. This methodology has been used successfully in Bolivia, Haiti, Kenya, and Mozambique by Food for the Hungry and Curamericas. Based on the Health Belief and other behavior-change models, Barrier Analysis is used to explore the following barriers to taking preventive action:

- Low perceived susceptibility to the illness or problem
- Low perceived severity of the illness or problem
- Low perceived efficacy of the preventive action
- Perception of problematic social norms
- Perceived self efficacy (including lack of time and money)
- Lack of cues for action
- Perceived divine will
- Other positive and negative attributes of the action

During the process, project staff members create questions guides to explore each of these barriers for a specific set of practices (e.g., lack of immediate breastfeeding). Following that, focus groups are conducted with care providers in each cultural group to determine which barriers are active and how they can be eliminated or worked around. Barriers are usually identified at the household, community, health facility, and district (e.g., policy) levels. Questions will also be used during these focus groups to learn culturally-specific beliefs and terms for diarrhea, ARI, malaria, and other illnesses and symptoms.

Since all behaviors cannot be researched, this methodology will be used to explore barriers to those behaviors which the staff feel are most detrimental to health status. The

results of Barrier Analysis are then used to further refine educational materials to confront barriers that care providers often face in taking preventive action and prompt care seeking. (This method is currently one of several methods being examined by the CORE Behavior Change Working Group as a tool that may be applicable in other countries.)

Prior to the development of the nutrition module of the curriculum that will be used with Care Groups, Curamericas plans to use Measure Evaluation's ***Trials of Improved Practices (TIPs)*** **methodology**[12]to better understand which educational messages will be the most successful. Curamericas will teach FUMESDER staff to use the TIPs methodology to design/improve the key educational messages and make changes to interventions. **During TIPs, the IMCI nutrition food box will be adapted to the local situation.** (TIPs was, in fact, originally developed for this purpose.)

Another way in which formative research will be used is through a **positive deviance study** which will be conducted at the beginning of the second year of the project. This study will help project staff to identify what foods and behaviors are being used successfully by mothers in the project area so that these coping strategies and nutritional practices can be promoted to all mothers.

Curamericas' approach to behavior change in this project area will rely greatly on the use of Health VolunteersHealth Volunteers organized into Care Groups. This is due in part to local audience channel preferences: many people in project communities are wary of outsiders and prefer to have education done by a neighbor who speaks their native language and understands their problems. By relying on home visits for behavior change communication, Health VolunteersHealth Volunteers will be able to meet with and educate not only mothers, but also other caregivers who regularly provide care to preschool children, such as grannies, older siblings, and husbands.

Our project budget demonstrates our behavior change emphasis: It includes over $65,000 (LOP) for the Health Educators who will be specifically tasked with managing our behavior change communication approach, over $39,000 in trainings, and over $35,000 for behavior change communication materials and incentives. The recurrent costs for the reproduction of the flipcharts used by the 895 Health VolunteersHealth Volunteers will be approximately **$2,500 every year (about $7.11 per Guardian, replacing flipcharts once every 2.5 years)**, slightly more than the cost of three Community Facilitators. **It will be well within the MOH's ability to cover this cost in the long-term if the will is there.**

Development of BCC Materials and Messages for Health Facility Workers:
The main materials that will be used for behavior change of health facility staff are (1) the IMCI training materials, and (2) other intervention-specific and task-specific curricula (e.g., KPC, LQAS, and HFA training materials), and (3) quality improvement checklists for follow-up after training. **Health facility staff and community-level health workers**

[12] See http://www.cpc.unc.edu/measure/techassist/tools_methods/inventory/tool4.html for more details on the TIPs methodology.

will be encouraged to use the exact same wording of relevant messages used in the Care Group materials as a way of standardizing the messages, and assuring that mothers are not confused by different wordings. The creation of Spanish – Chuj and Spanish – Acateca phrases books will facilitate better communication between health facility staff and patients. Specific training curricula that will be used for each intervention is mentioned in the intervention sections. Quality improvement checklists developed by the Senior Program Specialist and pretested in other Curamericas countries will be modified for use in Guatemala. Sample copies of these checklists can be found in **Annex H**.

The project will be staffed in a manner recommended by the MOH and their *Integral de Atencion en Salud* (SIAS) model. The MOH will provide Ambulatory Doctors/Nurses *(*AD*, Medico Ambulatorio)* who work in the health centers. This physician's role is to see patients, provide prenatal controls and deliveries (in cases of emergency), treat and teach prevention of all childhood diseases, provide emergency attention, and train and do some supervision of TBAs. S/he also supports, trains, and supervises the Institutional Facilitators, especially in the clinical aspects of their role. In our project, the Educational Coordinators support the physician in his role of training and supervising of the Institutional Facilitators, and will do some direct observation and feedback of the *educational* aspects of the Institutional Facilitators, reporting all findings to the Ambulatory Doctors. The three Ambulatory Doctors directly involved in this project will be supervised monthly by the CSP Coordinator, or by the MOH District Doctor in the District where one exists (San Miguel).

The Institutional Facilitator (IF) is a health technician or auxiliary nurse who is based in a health center or post. His/her main role is to train and supervise the Community Facilitators (see below), keep track of community health information, conduct sanitation programs, and coordinate with local and municipal leaders. S/he also will be responsible for organizing community health outreach posts (*Jornadas*) where women and children are immunized, and GM/P, vitamin A and iron supplementation, and deworming is done. In our project, we will have eleven IFs. As mentioned above, the educational aspects of the IFs' role will be supervised monthly by the lead Education Coordinator. The Ambulatory Doctors will supervise the clinical aspects of their role.

Community Facilitators (CF) are paid, community-based staff members who are responsible training 24-36 Health VolunteersHealth Volunteers and TBAs in health promotion. The CF supports the work of the IF, as well. Many of the Community Facilitators (CFs) were promoters in the old MOH system that were responsible for immunizations and health education. They will receive some retraining in immunizations and full training in C-IMCI and the project interventions. CFs will be responsible for establishing the Care Groups, and follow-up of pregnant women and newborns.

The Health VolunteersHealth Volunteers are community volunteers responsible for gathering vital events and health information, and providing health education on all key CS messages, to 12-20 houses each. HVs will also follow-up on defaulters for health services (e.g., vaccines), mobilizing mothers to attend the community health outreach

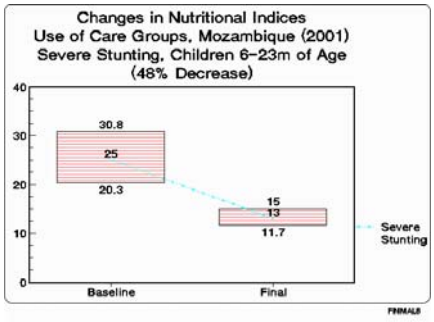
posts. They will do at least one home visit per day. This project will utilize female HVs in order to improve relations with predominately female caretakers, and this project will have 599 all HVs serving 56,743 people (one HV per 95 people, or one HV per 16 households). The HVs will be organized into Care Groups (see below) of 12-20 HVs. HVs will be supervised by the CFs by observing their educational skills demonstrations during Care Group meetings and during home visits.

Traditional Birth Attendants (TBAs) receive initial training from the MOH, then ongoing monthly training. They are responsible for prenatal controls as well as home deliveries. Their caseload varies since they do not actively seek out women who are pregnant, but rather wait for pregnant women to seek them out. TBAs will receive one day of training each month by the Ambulatory Doctors/Nurses and two days by the CF. TBAs will learn to do prenatal and postnatal education, and will follow-up on prenatal care defaulters, as well. HVs, CFs, and TBAs will coordinate concerning identified pregnancies and newborns. This coordination will take place in the Care Group meetings, to which TBAs will be invited. TBAs receive a small fee from their patients for their services.

Use of Community Facilitators, Care Groups and Health VolunteersHealth Volunteers to improve behavior change communication and equity of health care.

Care Groups are a community-based strategy for improving the health-related knowledge base of families. Successfully implemented by World Relief in both rural and peri-urban settings in Mozambique, this model focuses on building teams of volunteer mothers who represent and serve blocks of ten households in their villages[13]. The project will utilize a strong behavior change component that relies on community-based workers to deliver key messages to caretakers.

The Care Group strategy has been used by Curamericas' Senior Program Specialist in projects in several countries with extraordinary, measurable results. In Mozambique, for example, severe stunting dropped by 48% during a five-year project using Care Groups, and moderate stunting decreased by 25%. With this model, mothers are organized in small groups (e.g., 8-12 mothers) and educated biweekly on health topics by a paid health promoter. These mothers ("Health VolunteersHealth Volunteers") are provided with health education materials (e.g., flipcharts) that they then use to educate 19 other mothers each, extending the educational effort to all mothers in the project area. This multiplier model is especially appropriate in areas where few mothers speak the national language, which is true of our project area. The Care Group model mirrors the Guatemalan government's SIAS model, which has yet to be implemented in the project area. Curamericas would like to try out this novel approach in Guatemala in hopes that the model will be successful and applicable on a wider scale in other developing countries.



[13] Welch, Rikki. The Use of Care Groups in Community Monitoring and Health Information Systems. Child Survival Connections. Volume 1, Issue I. CSTS.

To carry out this project, Curamericas and its partner will organize Care Groups in each of the nine project communities. One Institutional Facilitator (IF, an auxiliary nurse) will be hired, who will organize the work of two Community Facilitators (CFs). Each of these CFs will work with 24 Health VolunteersHealth Volunteers who, in turn, will work with 19 other mothers each. Communities will first be mapped and censused by the CFs working with local leaders. During the first half of the year, mothers (Health VolunteersHealth Volunteers) will be educated via the Care Group model on immunizations, vitamin A, deworming, vital events reporting. During the second half of the year, mothers will be educated on nutrition, and prevention, recognition, management, and referral of common but deadly childhood diseases (e.g., pneumonia, diarrhea). Growth monitoring posts will also be held in each of the nine communities every two months. Children will receive vaccines, deworming medicine, and vitamin A during these posts, as well.

Descriptions of Key Interventions

Nutrition and Micronutrient Supplementation (Including breastfeeding promotion)

MOH Norms
The Guatemalan MOH is implementing the WHO IMCI strategy for nutrition and micronutrients in the country. One Ambulatory Doctor/Nurse or Institutional Facilitator in each health district has received training in the IMCI protocols in Huehuetenango and is responsible for training the other health staff in their district in these protocols. These nutritional protocols include assessment, classification and treatment and counseling of caretakers of the children.

It is recommended that every child under one year of age is weighed every month; children 1-3 years every 2 months, and preschool children older than 3 years every 3 months. Growth monitoring is promoted in the clinic and at the community level; however it is reported to be rarely done at the community level due to a lack of MOH health personnel and a focus on immunization and distribution of micronutrients during the health weeks.

During the session with a child, health workers assess the nutritional condition of the child to determine if the child is malnourished or anemic. The protocols recommend asking, observing, and exploring if the child has signs of malnourishment or anemia. These signs include visible emaciation, edema in both feet, low weight for age as determined by the standard growth chart on the child health card, and pale palms. Based on the assessment a classification of the child's nutritional status is determined. The classifications may include severe malnutrition; moderate malnutrition; dietary problems; adequate weight with no dietary problems; severe anemia; anemia; and, no clinical evidence of anemia.

Treatments for the individual classifications are the following:
Severe malnutrition and severe anemia– administer Vitamin A and urgently refer the child to the nearest reference hospital. Children under 6 months of age provided 50,000

IU of Vitamin A, children 6 months to 1 year of age are provided 100,000 IU, and children 1 year to 5 years of age 200,000 IU. For anemia, 300mg/daily of iron folate is given for two months, and encouragement is given to take tablets with vitamin C drinks for better absorption. After two months, one tablet per day is given for an additional month.

Moderate malnutrition – recommendations to the mother regarding the diet; administer Albendazole and Vitamin A to the child (one dose that day and a second dose on the following day); and, conduct a follow up visit of the child in five days.

Dietary problems – food counseling and follow up visit with the child in five days.

Adequate weight with no dietary problems – Praise of the mother regarding the healthy child and reinforcement of proper dietary practices and follow up appointment of the child according to the child's age.

Moderate anemia – Administer iron suspension to the child; administer Albendazole and Vitamin A to the child (one dose that day and a second dose on the following day); and, conduct a follow up visit with the child every 14 days; and, in the case of infection, treat the anemia after completing the specific treatment for the infection.

No clinical evidence of anemia – Provide iron supplement and counsel the mother or caretaker.

Dosing for children identified with anemia is with an Iron suspension (125 mg per 5 ml) and is administered accordingly:

2-3 months –1 ml
4-11 months – 1.25 ml
1-2 years – 2 ml
3-4 years – 2.5 ml.

Vitamin supplementation is provided to children 6 months to three years of age based on the following:

6m – 1 yr. – 100,000 IU
1 yr. – 5 yrs. – 200,000 IU.

Children 2-5 years are dosed with 400 mg of Albendazole or 500 mg of Mebandazol twice a year to control worm loads of hookworm, ascaris, and other worms. This is usually provided during the national "health week" vaccination campaigns conducted three times a year.

The MOH policy promotes exclusive breastfeeding until 6 months of age, and introduction of complimentary foods beginning at 6 months of age. Complimentary feeding is recommended until 2 years of age and MOH IMCI recommendations include appropriate foods, their amounts, and number of feeding sessions per day based on the child's age.

Quality Improvement

The quality of growth monitoring and promotion, nutrition counseling, and micronutrient supplementation will be assured and improved through the establishment of policies that outline the proper procedure for C/G nutrition intervention. Supervisory checklists and

observational techniques will be used by the field staff to monitor implementation of the interventions following the WHO IMCI guidelines. These quality improvement checklists also will serve as a measure of the impact of the training in the nutritional interventions. **The project staff will be trained in supervision and quality improvement techniques by Curamericas' Program Specialist (including the use of quality improvement checklists) in June 2003.**

IFs will ensure that community data are valid through periodic and random spot checks of the reported data. These spot checks will compare household level data with data in the registries maintained by the CFs and HVs (i.e. Child Registry). Client satisfaction interviews (i.e. Exit Interviews) will be used to monitor the quality of services provided by the field staff at health facilities and at the community level. Referrals will be made using the MOH referral system to the Hospital Nacional de Huehuetenango in Huehuetenango, the closest referral rehabilitation center.

Availability of Supplies and Equipment

The MOH supplies Albendazole, Vitamin A, and iron supplements as part of its SIAS program. In some areas of Guatemala the MOH also provides fortified powered milk to children, but that is not presently being provided in the Department of Huehuetenango, where this project is located. The project has purchased Salter Scales to facilitate the weighing of children in the villages.

The MOH will provide the supplies to the health districts based on monthly requests from the districts. In discussions with MOH staff it was mentioned that there are occasional problems with reliable amounts of stocks and representatives of the MOH departmental office in Huehuetenango stated that they are not always provided the necessary supplies from the MOH's national depot (based in Guatemala City). In those cases the departmental office is authorized to contact a certified laboratory in Guatemala City for the supplies.

The districts are responsible for requesting the needed supplies from the departmental office on a monthly basis using standard MOH supply forms. The MOH transports supplies utilizing public transportation with personnel from the district. In order to facilitate and ensure adequate supplies for this project, C/G has budgeted for a monthly transportation of the supplies to the project health facilities using a hired truck. This will be for both supplies for the CS project as well as other supplies requested by C/G's partner.

Supplies in the health facilities will periodically be checked for expiration dates and quantity, and compared to the supply forms maintained by the corresponding staff. In cases where logistics management is sub-par the staff will receive appropriate training in logistics management and continually monitored for improvement.

Approach

Based on the high levels of malnutrition in the area (from the baselines results) and its' affect on child mortality, the level of staff effort in nutrition has been increased from 25%

to 30%. C/G will conduct further studies on food security in the project area. Principle activities for this intervention are utilizing the clinical and community IMCI components for nutrition, positive deviance studies (PD), and Trials for Improved Practices (TIPS) strategy for improving the nutritional status of children and promote behavior change among education of caretakers. PD studies will provide the project staff with information to identify what foods and behaviors are being used successfully by mothers of well-nourished preschool children so that these practices can be promoted to all mothers.

CORE is presently developing questions on food security to include in the KPC. The project will integrate these questions into the mini-KPCs that are planned annually to determine what degree food insecurity contributes to the high levels of malnutrition. If food insecurity is found, C/G will contact other organizations that might be interested in conducting interventions geared towards improving food security in the project area (e.g., increasing agricultural productivity and accessibility).

A positive deviance study and TIPs are planned for this project, and should help to determine practical ways in which to improve child nutrition. Particular attention will be given to improving immediate breastfeeding (e.g., working with TBAs), encouraging children to eat despite their level of appetite, initiating complementary feeding at six months, increasing usage of iodized salt, and improving the diversity of the diet (especially in regards to micronutrient-rich foods). The project staff will use Care Groups to teach PD practices and the Program Coordinator will assure that clinic staff are adequately trained in the management of children with severe malnutrition (including the WHO 10 Steps for the care of severely malnourished children[14], and guidance on delaying iron supplementation) and how to educate parents on preparation of Hearth-type meals. Home-based therapeutic care will be considered. If HBTC is included, matching funds will be used for those activities.

Given the high-levels of moderate and severe malnutrition the project will promote appropriate behaviors during Care Groups, in the clinic and during household visits. There is a high rate of bottle-feeding among caretakers in the project site and staff will promote positive breastfeeding messages and messages that discourage bottle-feeding, including the promotion of exclusive breastfeeding until six months of age and complimentary feeding using the IMCI food box to promote proper nutrition. A barrier analysis study will be conducted in the field to determine barriers to breastfeeding so that the educational messages can be tailored appropriately.

The KPC data set will be computerized in May and associations with malnutrition will be sought. These results will allow project staff to focus educational and nutritional activities on those groups who are at highest risk of having a malnourished child.

Project staff will work and mobilize community leaders to promote Vitamin A supplementation of children over six months of age through meetings with the municipal governments and community development committees. During these meetings the

[14] See http://web.uct.ac.za/depts/chu/mch10j.rtf for the 10 steps.

positive affects of Vitamin A supplementation will be promoted and leaders will be asked to encourage the women in their communities to give their children Vitamin A. Vitamin A is provided by the MOH in given to children

High-quality growth monitoring will be given attention since very little is being done presently. Growth monitoring activities will be conducted during Care Groups, monthly community visits, in the home and in the clinic. Preschool children will be weighed and the nutritional status monitored according to the schedule below:

- Children under one year of age every month,
- Children 12-35 months every two months, and
- Children 36-59 months every three months.

Curamericas will train C/G staff in conducting PD studies and in the TIPS methodology. Curamericas' Senior Program Specialist has conducted previous training in these methodologies and has developed Spanish training materials. Health facility staff will receive a one-day review in the management of children with severe malnutrition (using the WHO publication) during their regular monthly meetings. During the training in PD that will be given to project staff, clinical staff will be taught how to teach parents to prepare Hearth-type meals. We will also be discussing the possibility of doing home-based therapeutic care with the Nutrition Working Group of CORE over the next few months.

Behavior Change Communication (Nutrition)
The following key household nutritional behaviors and care-seeking behaviors will be promoted (amongst others):

1. Immediate breastfeeding of Infants immediately after birth and utilization of colostrum.
2. Exclusive, on-demand breastfeeding of infants for the first five months of life.
3. Breastfeeding of children for 24 months.
4. From about 6 months, children should be provided with appropriate complementary feeding (including iron- and vitamin-A-rich foods) and continue breastfeeding until at least 24 months.
5. Complementary foods given to children should be nutritionally-dense, thick enough to give a child the calories that the child needs.
6. Tortillas, tamales and other cooked foods should not be stored without refrigeration for more than one day.[15] Children should not be bottle-fed.
7. Children should be dewormed every 4-6 months.
8. Children from 6m onward should receive vitamin A supplements, and should receive special treatment with Vitamin A when they have measles, and other severe infections.
9. Mothers should receive vitamin A supplements within two months of delivery.
10. Children 0-23m of age should be brought for growth monitoring on a monthly basis.
11. Children who are malnourished should be brought for a medical examination.

[15] Based on: Microflora of maize prepared as tortillas. Capparelli E, Mata L. *Appl Microbiol* 1975 Jun;29(6):802-6

12. Sick children should receive extra fluids and continue feeding, and should be given more food during recovery.
13. Women should increase their nutritional intake and take iron supplements during pregnancy.
14. Families should use iodized salt in order to prevent iodine deficiency disorder.

Given the results on the baseline assessments, special attention will be given to educating all mothers and care providers (through the Care Group strategy) on:

- the **dangers of bottle feeding**;
- **immediate breastfeeding** (also taught through TBAs);
- **encouraging children to eat** despite their level of appetite;
- initiating **complementary feeding** at six months;
- increasing usage of **iodized salt**;
- **improving the diversity of the diet** (especially in regards to micronutrient-rich foods);
- **other positive-deviant behaviors identified through the PD study in Year Two;** and
- **how to make "Hearth meals"** for nutritional rehabilitation of malnourished children (e.g., using the Nutrient Blocks exercise discussed during the recent CORE Hearth TAG).

Given the results on the baseline assessments, special attention will be given to educating all **health care providers** in the project area and District health office on:

- **How to do vitamin A supplementation on a routine basis and for the treatment of severe malnutrition and infections** (e.g., measles), **and the importance of doing so** in terms of reduction of mortality. (The KPC found that only 28% of children 12-23m received a dose of Vitamin A.)
- **How to do high-quality growth-monitoring and promotion and the importance of doing so on a regular basis** in order to decrease levels of malnutrition. (The KPC found that only 22% of children 0-23m had been weighed in the past four months.) Counseling skills will be part of this training. Curamericas' results in Haiti (46% and 64% reductions in malnutrition [WAZ<-2] in two project areas within a 42 month period) will also be presented to health workers in Guatemala as a case history in what can be done when health facility and community health workers work together on nutrition interventions.
- The importance of promoting proper child feeding, especially **exclusive breastfeeding prior to six months, introduction of complementary foods at six months, and delayed weaning**.
- **To accomplish this, a three-day workshop will be given to all health facility staff on Growth Monitoring / Promotion, Nutrition, and Micronutrients.** This workshop will go beyond the nutrition training given during the IMCI clinical training, and will be done after the positive deviance workshop so that the information gained during the PD study can be integrated into this training.
- The CS Program Coordinator will train clinic staff in the **management of children with severe malnutrition** (including the WHO 10 Steps for the care of severely

malnourished children[16], and guidance on delaying iron supplementation) and how to educate parents on **preparation of Hearth-type meals**. (Home-based therapeutic care will be considered. It HBTC is included, matching funds will be used for those activities.)

Maternal and Newborn Care

MOH Norms

The MOH's missions for maternal and newborn care (MNH) is to *increase the practice and use of MNH services within Guatemala* through improving and increasing access to prenatal care and controls, providing clean and safe delivery care, improving emergency obstetric care (EOC), and improving newborn care.

The MOH norms for MNH services outline the responsibilities for each level of the health care services; family, community and health facility. Recognizing that the TBA plays an large role in providing care to pregnant women in the rural area, the MOH is involved in training and certifying TBAs in prenatal and delivery care including the recognition of danger signs during pregnancy and delivery, providing iron folate and folic acid to pregnant women, and referring women to health centers when emergency cases are identified. The TBA and health guardian collaborate with the CFs and IFs to promote MNH services.

In our project area there are presently no MOH-certified TBAs. According to the MOH staff in Huehuetenango, the ambulatory doctors and nurses are responsible for training the local TBAs in selected topics; however the medical staff generally do not plan these activities due to a lack of time.

Pregnant women are provided with daily doses of iron folate and folic acid/prenatal vitamins. Tetanus Toxoid (TT) is recommended once during each trimester for three TT doses during the course of the pregnancy. Women are recommended to increase their food intake and to reduce their workload. The MOH recommends that pregnant women have a birth plan which outlines where the birth will take place, who will accompany the pregnant women to the birthing center, how they will get there, who will take care of the home, and emergency actions to take.

TBAs are responsible for providing post natal care to women within 72 hours after delivery and during the following 40 days. Women are referred to a health center during the first 40 days to vaccinate the newborn with BCG and polio, as well as complete the TT schedule for women. The MOH guidelines recommend that the new mother takes 90 tablets of iron folate after delivery. The MOH norms do not call for the provision of Vitamin A to the mother. Education is provided to women on birth spacing methods, breastfeeding, and proper maternal nutrition.

[16] See http://web.uct.ac.za/depts/chu/mch10j.rtf for the 10 steps.

Emergency cases (prenatal, birthing or post natal) are referred to the nearest hospital. In the project's case, this is the Hospital Nacional de Huehuetenango, located in the department's capital six hours from the project area.

Quality Improvement
This project will hire women who speak the local languages as the IFs and CFs in order to increase the trust and confidence of beneficiaries who are often reluctant for cultural and personal reasons to see a male health worker. This increased trust is expected to lead to improved access and services provided to the pregnant women, and improved pregnancy outcomes.

MNH service quality and counseling skills will be assured through regular supervision of the staff and application of quality improvement checklists. ADs and ANs will monitor TBAs through direct supervision in the field and inviting the TBAs to the health centers to assist in deliveries. Those TBAs and health workers who receive scores lower than 80% on the quality improvement checklists will receive feedback and coaching in order to improve their scores. These checklists will be developed using similar instruments previously developed by the Guatemalan MOH (with technical assistance from JHPIEGO), and input from the project staff. These quality improvement instruments include topics on bio-security, availability of IEC materials, and management of prenatal, delivery and post natal complications, and focus on the health worker and availability of materials. Other checklists that will guide this project include those developed by FOCAS in Haiti. (See **Annex H** for copies.)

The project will train TBAs and other health workers in the use of Partographs as a tool to monitor the quality of childbirth, and these records will be maintained for further evaluation. The supervisors will be responsible for evaluating the correct use and completion of the Partogragh, and appropriate feedback will be provided to the worker.

MNH supplies in the health facilities will periodically be checked for expiration dates and quantity, and compared to the supply forms maintained by the corresponding staff. The cold chain will be maintained following MOH and WHO norms including recording the refrigerator temperature twice daily and transporting vaccines in appropriate thermos' with cold packs. In cases where logistics management is sub-par the staff will receive appropriate in-service training in logistics management and continually monitored for improvement.

Curamericas will develop and train the staff in the use of selected job aids in maternal and neonatal health care as part of the training in maternal/newborn care (January – February 2004). These job aids are referral tools that the IFs, ANs, and ADS can use to guide them in their activities. BASICS II has developed some nutrition job aids for maternal and neonatal health care and these will be translated and adapted for the clinical staff[17].

[17] http://www.basics.org/publications/pubs/interventions/contents.htm

Availability of Supplies and Equipment

The MOH provides iron folate and folic acid as part of its' MNH interventions. However, staff in the project area report that they dispense these micronutrients as they are available and the MOH does not provide enough supplies to meet the recommended norms, possible because the MOH does not have accurate information on the number of pregnant women in the area. C/G will use community census data and maintain accurate population data in order to improve the requests for appropriate number of doses for the population. In cases where supplies are not provided in a timely manner, the C/G project director will be responsible for soliciting supplies directly from the MOH and advocating for more supplies with the municipal governments. Families also are referred to private pharmacies where they can buy prenatal vitamins with folic acid and iron folate.

The MOH provides the vaccines (TT, BCG, and polio) and related supplies and eye drops to the health centers. There are reported to be no problems with these at the health centers. As mentioned above, Vitamin A is not recommended as an MOH norm and the project will purchase or receive donated Vitamin A tablets that will be shipped to the project with work teams. Women who recently gave birth will receive one dose (200,000 IU) within three months after delivery in order to reduce morbidity and mortality associated with child birth. Curamericas will document the Vitamin A intervention in order to demonstrate its' benefits to the MOH and local leaders, and Curamericas will advocate for the provision of Vitamin A postpartum using MOH or municipal government funds.

Presently, health centers with a local cold chain (including refrigerators and thermos) include San Miguel Acatán, San Sebastian Coatán, San Jose and San Rafael la Independencia. The health facility in Santa Domingo currently does not have a refrigerator thus vaccines must be transported from one of the other health centers to Santa Domingo on the day immunization activities are programmed. In 2003, the MOH will provide a gas refrigerator with extra gas tanks for Santa Domingo so that immunization activities can be offered daily. Syringes and medical waste is disposed of in hard plastic, puncture resistant containers and the health workers are trained to dispose of these containers in pit latrines. In the field, cold boxes, insulated vaccine carriers, and thermos flasks will be used to maintain refrigeration during visits to each community.

The project IFs, Health Educators, and Information Manager will receive two days of immunization training. This training will focus on the diseases prevented by the vaccines, proper cold chain management, correct vaccination techniques, and correctly completing the vaccination cards/records. This training is scheduled for San Miguel Acatán in April 2003.

Approach

The project will use a focus on improving key behaviors, care seeking behaviors and health worker capacities through a community-based system of health care previously described. TBAs will receive intensive training in clean/safe delivery practices, newborn care, STI, anemia, and danger signs during pregnancy, eye prophylaxis, early detection and referral of sepsis, HBP and hemorrhage, prevention of hypothermia and asphyxia

relevant topics. C/G and Curamericas will develop educational and promotional materials specific to this intervention. The health staff will follow MOH norms for iron folate/folic acid supplementation, TT vaccination, prenatal care, delivery care, and neonatal care.

For proportion of mothers of children 0-11m who had at least one prenatal control during their last pregnancy, ten of the supervision areas had already reached the final objective level set in the proposal (30%). Accordingly, we have increased the final level for this indicator to 40%.

Over half (52%) of mothers of infants said that they had eaten *less* than usual during their last pregnancy. Knowledge of danger signs during the postpartum period – both for the mother and child – were particularly low. Education should particularly stress these aspects of maternal and newborn care. Given the low proportion of institutional births and these low knowledge levels, the training of TBAs should focus on proper referral, preparation of birth plans, education on danger signs, and the importance of prenatal and postpartum visits.

Prenatal Services

The project will work with local communities and families to develop birth plans for each pregnancy that identifies the following: where the baby will be delivered and by whom; how much it will cost; if a plan for saving the monies for the delivery exists or not; and, who to contact and where to refer the mother in case of an obstetric emergency. The MOH, with technical assistance from JHPIEGO, has developed a chart for birth plans that is used by the health workers and health workers will use this along with a written form to track each birth. The IFs will work with the Mayors and Auxiliary Mayors to assure that each community has an emergency transport plan to assist women who have problems during labor.

Expected delivery dates and newborns will be tracked using pregnancy and child registries. Women and children who fail to receive services related to maternal and newborn care on schedule (e.g., iron/folate supplements, prenatal care, postpartum vitamin A) will receive a home visit from a HV or CF who will motivate the mother to attend the health outreach posts. These services will be recorded in the register, and on the mother's prenatal card or child's growth chart/immunization card, as well.

Iron/folic acid supplements will be given to pregnant and anemic women in the health facilities according to MOH norms. The women will be provided with a 30 day supply and asked to return in one month for another 30 day supply and their next prenatal control. The HVs and TBAs will help to identify pregnant and anemic women and refer them to these facilities.

Education of pregnant and non-pregnant women will focus on: the need to receive at least two antenatal visits prior to each pregnancy; that women need to have at least two doses of TT prior to their pregnancy; all women should know the principal signs of anemia and seek care when they have these signs; all women who are pregnant should maintain

healthy behaviors (e.g., reducing workload, rest, nutrition, supplements, prophylaxis); and, that all pregnant women should eat more and better during their pregnancy in order to help themselves and their growing child. Health workers will be trained to provide all pregnant women (and those with anemia) iron/folate supplementation.

Delivery Care

Most births are attended by a TBA in the mother's home; therefore the project will strongly focus on improving delivery care of the TBAs. According to local information, TBAs allow women to choose their birthing position according to how the women are most comfortable.

Despite the fact that TBAs are responsible for the vast majority of births in the project area, the majority of the TBAs in the project area do not have formal training. The Ambulatory Doctors (ADs) hired as part of this project, and the health facility nurses, will share the responsibility for training the TBAs monthly on selected topics (e.g., clean/safe delivery practices; newborn care; STI, anemia, and danger signs during pregnancy; eye prophylaxis; early detection and referral of sepsis, HBP and hemorrhage; prevention of hypothermia and asphyxia). TBAs will be included in each Care Group, and their inclusion will facilitate coordination with the HVs. Each TBA will receive the full set of educational messages used in this project, and a small flipchart to educate mothers with whom they have contact. TBAs, Health VolunteersHealth Volunteers, and Community Facilitators will identify pregnant women during home visits and refer them to health clinics and posts for prenatal care. TBAs and HVs will also refer postpartum women to the community outreach health posts and health facilities for early detection and management of high blood pressure, hemorrhage, and sepsis.

Care of the newborn in the home includes drying and cleaning the newborn, immediate and exclusive breastfeeding, administering antibiotic eye drops, tying, cutting and cleaning the umbilical cord and "kangaroo" care. The project will promote the use of Partographs to monitor the delivery and recognize signs for immediate patient referral to the nearest health center.

The ADs, CSPC, Education Coordinator, IFs, and health facility nurses will receive a five-day training-of-trainers on Maternal and Newborn Care from Curamericas' Senior Program Specialist. This training will include elements used by AT Bang in India for reducing neonatal mortality such as the use of a simple neonatal resuscitation mask, and management of newborn sepsis and breastfeeding problems; changing practices in health centers (e.g., allowing women to use the posture that they want during delivery, avoiding episiotomies); and use of the Partograph[18]. Curamericas will be in contact with JHPIEGO and others in Guatemala concerning their MotherCare project when devising this training and intervention strategies since they have had success in training TBAs in the Sololá and Quetzaltenango areas in the past. The TBA training will encompasses proper newborn care including, but not limited to: immediate crying, drying and cleaning,

[18] Preventing Prolonged labor: A Practical Guide. The Partograph, WHO/FHE/MSM/93.8.

immediate and exclusive breastfeeding, administering antibiotic eye drops, tying, cutting and cleaning the umbilical cord and “kangaroo" care.

Key household behaviors that will be emphasized include**:** all mothers and adults who assist women during the delivery should take actions to assure a clean, safe delivery (including clean hands, clean delivery surface, and clean cord cutting and care), and good postpartum care, and should have the materials on hand to do so prior to the delivery; women should know the danger signs and symptoms of complications during pregnancy (including bleeding, convulsions, pallor, swollen hands or face, labored breathing, and fever) and should seek immediate care when they have any of these signs; and, husbands and other family members who assist in deliveries should know the danger signs of pregnancy, as well, and how they should respond when these signs present.

The project will work with communities to develop emergency transport plans for taking women to a health center or hospital when they have problems during pregnancy and delivery. Health centers will develop referral and transport plans for transporting women to the closest referral center in case of an obstetric.

Curamericas, with the help of volunteer work teams, will construct small delivery houses in select communities where women further away from a health center can come with her family to deliver. These facilities will utilize traditional designs and respect the local cultural birthing practices. Women can choose to deliver with a trained TBA or a clinical staff member. There will be a health worker assisting in case of any complications and the client will be transferred to the nearest referral center.

Postpartum/Neonatal Care

Vitamin A, although not a part of MOH services, will be provided to women within six weeks after delivery following the recent guidelines published by the International Vitamin A Consultative Group[19]. Curamericas staff met have met with the MOH and received verbal approval of the administration of Vitamin A to postpartum women. Postpartum women will receive 400,000 IU as two doses of 200,000 IU at least 1 day apart as soon after delivery as possible and not more than 6 weeks later and/or 10,000 IU daily or 25,000 IU weekly during the first 6 months after delivery. Vitamin A will be provided by Curamericas through donations received in the office or purchased through MAP International and International Dispensary Association in Amsterdam.

The project will implement a pilot study and utilize neonatal resuscitation masks with lower-level health workers (IFs and TBAs) in one project area to reduce neonatal deaths such as the use of a simple neonatal resuscitation mask, and management of newborn sepsis and breastfeeding problems associated with asphyxia. This method has been implemented successfully in India[20]. Curamericas Program Specialist will be in contact with Dr. Bang in India and discuss this strategy and its’ activities before implementing in

[19] www.ivacg.ilsi.org

[20] Bang AT, Bang RA, Baitule SB, Reddy MH, and Deshmukh MD. Effect of home-based neonatal care and management of sepsis on neonatal mortality: field trial in rural India. *Lancet* 1999 Dec 4; 354(9194):1955-61.

the field. Based on the results, Curamericas will expand the program to the other project areas.

CFs will provide primary care to the newborn and new mother in the home and visit each mother within seven days after birth. At this time the child will be weighed, receive his/her BCG and anti-polio vaccines, and monitored for signs of illness. During the visit the CF will monitor the postpartum woman for signs of infection, gives her Vitamin A, promotes exclusive breastfeeding, counsel the women on appropriate feeding habits of the child, and provide initial counseling on birth spacing methods. .

The CFs (who are trained by the IFs) will also train the TBAs during the regular Care Group meetings in each area to do health promotion (e.g., healthy behaviors during pregnancy; developing an emergency transport plan; BF; iron/folate supplementation; signs of sepsis). The Institutional Facilitators (IFs) will be equipped with stethoscopes, blood pressure cuffs, and standing scales so that they can monitor pregnant women's blood pressure and weight gain during pregnancy. This will be done during the community health outreach posts held in each community once a month.

The ADs and health facility nurses will use the information gained during their maternal and newborn TOT course (see below) to train the TBAs with whom they work. During this workshop, the health facility nurses will also learn about (among other things) the Baby Friendly Hospital Initiative, and how to ensure that their facility is in accordance with it.

As mentioned above, TBAs will receive one day of training each month from the ADs or health facility nurses. CFs and TBAs will also receive training in health promotion from the IFs every two weeks for several hours.

Training of CFs in community IMCI will improve equity by giving mothers a locally-available resource person when they are pregnant or have recently delivered. By having HVs visiting each mother of a preschool child through the Care Group strategy, equity for education on maternal and newborn care topics will be ensured. Follow-up of defaulters of health outreach posts during HVs' and CFs' regular home visits will help ensure equitable access to these services, as well.

Behavior Change Communication (Maternal and Newborn Care)
The following key household behaviors related to maternal and newborn care will be promoted at the **household level** (amongst others):

1. **All women between the ages of 15 and 49 should receive at least two antenatal visits prior to each pregnancy, and should receive at least two doses of TT prior to their pregnancy.** This will receive special attention since the KPC found that only 20% of mothers of infants had at least two prenatal controls by a qualified health worker during their last pregnancy.
2. **All women should know the principal signs of anemia and seek care when they have these signs.**

3. **All pregnant women (and those with anemia) should receive iron/folate supplementation.**
   (The KPC found that only 33% of mothers of infants took iron supplements during their last pregnancy.)
4. **All women should know the signs of STIs, and should seek early detection and care for STIs when they have these symptoms or they have unprotected sex.**
5. **All women who have abortions should seek immediate care from trained medical staff.**
6. **All women who are pregnant should maintain healthy behaviors (e.g., reducing workload, rest, better nutrition, supplements, prophylaxis), and should receive support from their families and community to do this.** This will receive special attention since the KPC found that over half (52%) of mothers of infants said that they had eaten *less* than usual during their last pregnancy.
7. **All women who are pregnant should have a delivery plan** based on the woman's history and health status. All family members, TBAs, and those who assist women during the delivery should be aware of these plans, and TBAs should be trained to assist women in the preparation of a delivery plan.
8. **All mothers, TBAs, and adults who assist women during the delivery should take actions to assure a clean, safe delivery** (including clean hands, clean delivery surface, and clean cord cutting and care), **and good postpartum care, and should have the materials on hand to do so prior to the delivery.**
9. All women, TBAs, and other who assist in deliveries should **know the danger signs and symptoms of complications during pregnancy** (including bleeding, convulsions, pallor, swollen hands or face, labored breathing, and fever) and should seek immediate care when these signs are seen. **This will receive particular attention since the KPC found that only 5% of mothers could cite two or more signs of danger in newborns, and only 2% were able to cite two or more maternal danger signs during the postnatal period.**
10. Women should **breastfeed children immediately after delivery and keep the child warm.** All mothers, TBAs, and adults who assist women during the delivery should take actions to prevent hypothermia in the home (e.g., drying the baby after birth, cutting the cord after one minute, then providing immediate skin contact with the mother and initiating breastfeeding).
11. **All postpartum women should be seen by a trained health worker** in order to ensure early detection and management of high blood pressure, hemorrhage, and sepsis. (The KPC found that only 23% of mothers of infants had a postnatal check-up.)

At the community-level, Community Facilitators will educate community leaders on the **importance of having an emergency transport plan** for taking women to the health center or hospital when they have problems during pregnancy and delivery.

Given the low proportion of institutional births and the very low knowledge levels of danger signs – in addition to the relevant items above – the following things will also be promoted with **health-facility and community-level health workers:**

1. All health centers should have a **plan for transport to the next level of care** for women who have problems during delivery. TBAs should be properly trained in referral.
2. All TBAs and those assisting mothers with a delivery should **stay with the mother for at least four hours following delivery, revisit the mother within three days, and promote the giving of colostrum and BCG and Polio 0 immunization during that visit**. During the postpartum visit, TBAs should **support mothers in exclusive and on-demand breastfeeding, promote good maternal nutrition, and promote family planning**.
3. Health center staff should **assure that their facility is following the baby friendly hospital initiative**, taking steps to change policies and practice in accordance with the "ten successful steps for breastfeeding."
4. All TBAs and adults who assist women during the delivery should be able to **recognize hypothermia in newborns and know how to rewarm hypothermic babies**, and refer severely hypothermic newborns.
5. All TBAs and adults who assist women during the delivery should **assure that newborns are breathing and that newborns receive eye prophylaxis** (2% silver nitrate). During this project, we will pilot the use of **neonatal resuscitation masks** by TBAs, as well.
6. All TBAs and HVs should **know the symptoms of serious bacterial infections in newborns and should refer suspected cases** to the closest CFs or health facility.

Child Spacing

MOH Norms

Child spacing and family planning presently are a high priority of the MOH and Curamericas added this intervention in the initial proposal at their request. The current MOH norms and practices calls for promoting a birth interval of at least 24 months in order to reduce infant and maternal morbidity and mortality affiliated with short birth intervals. The MOH has not integrated recent USAID recommendations that recognizes the benefits among infants and women of increasing the birth interval from 24 to 36 months.

The MOH is promoting both modern and natural methods of family planning. Temporary methods that are available in the health centers are oral contraceptives, condoms, IUD (copper-T), and Depo-Provera. Men or women who are interested in a permanent (surgical) methods are referred to the Hospital Nacional de Huehuetenango. Modern methods are provided free of charge to the clients by the MOH. Natural methods promoted by the MOH include Lactational Amenorrhea Method (LAM) and Standard Days Method (SDM).

Counseling is provided by the CF and IF in the community and in the clinic. The MOH policy recognizes that it is the client's decision to use a method or not, therefore the MOH provides counseling on all methods allowing the client to make informed choice.

Quality Assurance
Since this project will employ women fluent in the local languages, the project staff expect that this will lead to an increase trust among project beneficiaries and an increase in acceptance of child spacing methods. Twice a year the project will utilize exit interviews to monitor client satisfaction.

Counseling skills will be assured through regular supervision of the staff and directly observing individual counseling and Care Group education sessions using quality improvement checklists that have been developed by Curamericas (see **Annex H**). Those CFs, IFs and ANs who receive scores lower than 80% on the quality improvement checklists will be identified and individual coaching and/or in-service training will offered.

Family planning supplies in the health facilities will periodically be checked for expiration dates and quantity, and compared to the supply forms maintained by the corresponding staff. In cases where logistics management is sub-par the staff will receive appropriate in-service training in logistics management and continually monitored for improvement.

Staff will receive training on the use of quality improvement checklists in July 2003 by Mary DeCoster.

Availability of Supplies and Equipment
As mentioned, the MOH provides condoms, Depo-Provera, oral contraceptives and IUDs to the district clinics and health posts. In addition, many IEC materials are available from the MOH and USAID-funded projects in the country such as Calidad en Salud (a joint MOH-USAID project to improve the quality of MOH services in the country). These materials include wall posters and individual folders explaining the modern and natural methods that are available. Large banners stating that child spacing methods are available are posted at the health centers.

There have not been any reported problems with maintaining the proper levels of child spacing supplies which may be a result of it being a high priority intervention within the MOH and a focus of attention from donor agencies. In the case that there is a stock out of a method the project has received a verbal commitment from the local USAID Title II funded project, Associacion SHARE, to supply family supplies on a as needed basis. Calidad en Salud is working with the departmental health office to improve FP logistics management at the health district level, and the district and project ANs will receive this training.

Approach
The current level of use of family planning methods is much higher than originally anticipated in the project proposal. However, there are still many mothers (59%) who do not know where they can get materials and information on methods for child spacing. Also, significant portions (47%) of children 12-23m of age are born within two years of their older sibling. Given the very high levels of child malnutrition in the project area and

the higher than expected levels of family planning method usage, the overall level of effort for child spacing activities has been decreased from 15% to 10%.

The promotion of child spacing will be done by during opportune times with the caretaker and her partner. All field staff are responsible for identifying WRA and their partners who are interested in family planning through individual visits or during clinical consultations. Individual counseling sessions will be conducted during clinic visit and household visits, and large group education sessions will be conducted with Care Groups. Presently the MOH guidelines promotes spacing children at least 24 months from the previous birth. However, based on recent international research (i.e. results presented at the "*Three to Five Saves Lives*" Optimal Birth Spacing Initiative International Conference in October 2002) and recent USAID guidelines, family planning materials will be developed that promote birth spacing of at least three years.

A network of HVs and organized into Care Groups will be used to educate women and their partners/spouses on child spacing methods during the HVs' monthly meetings to each household in the project area. The HVs will refer women and their partners to local health facilities in order to get family planning counseling and methods.

All women will be tracked by CFs using their women's register, and CFs will conduct home visits to current users of family planning methods, assuring that they are using the methods properly. ADs and IFs will also refer women to health facilities for methods during the monthly community health outreach posts and consultations in each community (provided by the ADs). Health facility nurses will be responsible for counseling women and their partners in child spacing using the GATHER guide to counseling (Greet-Ask-Tell-Help-Explain-Return).[21]

Each HV will be responsible for assuring that all of the women of reproductive age and their partners/spouses in the 12-20 households that the HV serves are educated on the importance of child spacing, modern child spacing methods and natural methods (including LAM and Standard Days Method), and where methods and further counseling are available. By using the Care Group methodology, we will assure that all WRA and their partners are visited and educated on child spacing methods. All health workers will allow WRA and their partners to decide on using a method or not based on informed choice.

In order to improve communication between project staff and those who only speak the *Acateca* or *Chuj* languages, a health phrasebook will be developed during this project so that Spanish-speakers will be able to communicate key phrases in each of these three languages. This phrasebook will include questions and key messages about child spacing.

During this project, the CSPC, Education Coordinator, IFs, health facility nurses, and ADs will receive a four-day training in Child Spacing in Year Two of the project,

[21] See http://www.jhuccp.org/pr/j48edsum.stm for more information.

provided by Mary DeCoster with technical assistance from APROFAM. (This course will include information on the GATHER counseling method, post-abortion family planning counseling.) TBAs, CFs, and HVs will receive a more basic course through their education with the child spacing educational module that will be used by the CFs to educate both TBAs and HVs. (CFs will be trained in this by the IFs during their regular meetings.)

Curamericas will develop educational materials based on the materials already developed by the MOH and APROFAM and materials used by Curamericas partner in Bolivia. Family planning methods that are offered in the area include condoms, oral contraceptives, IUD, and Depo-Provera. All of these methods are provided free of charge by the MOH.

WRA who are interested in a permanent method will be referred to the APROFAM clinic in Huehuetenango. Natural methods such as the Standard Days Method (SDM) and Lactational Amenorrhea Method (LAM) are promoted as well.

Behavior Change Communication (Child Spacing)
The following key household behaviors related to child spacing will be promoted at the **household level** (amongst others):

1. Women of reproductive age should use modern child spacing methods or abstinence in order to delay their first pregnancy until their twenties.
2. Women who already have at least one child should practice child spacing using modern family planning methods in order to space births 2+ years apart, when they do not want to have any more children, or are unsure.
3. Women who use child spacing methods should follow their care providers' instructions fully.
4. (Key messages about each child spacing method – including the pros and cons of each method – will also be included.)
5. (Key messages on the location and price of family planning methods will be included since 59% of the women surveyed in the KPC did not know where they coud get materials and information on methods for child spacing.)

The following things will also be promoted with **health-facility and community-level health workers:**

1. All women who do not desire another child or are unsure should be given information about child spacing methods.
2. All women who receive information on child spacing methods should be given a choice of methods, and information on the pros and cons of each method.
3. Health workers should use the GATHER six steps (Greet, Ask, Tell, Help, Explain, and Return) when counseling women on family planning.

Pneumonia Case Management

MOH Norms

The MOH follows the WHO IMCI guidelines for pneumonia case management and the standard IMCI algorithms. The departmental office of the MOH in Huehuetenango is responsible for training ADs and ANs who also are the district directors in IMCI and C-IMCI. These health workers are then responsible for training the other health workers including the IFs in clinical and C-IMCI, and the CFs and HVs in C-IMCI. The MOH has developed a five-day short course in IMCI and C-IMCI that is held in Huehuetenango. Training in case management and recognition is done at the Hospital Nacional in the same city and simulated cases are used for training as well. In the field it is expected that the trained workers will implement the exact training locally, however this does not generally happen since the ADs and ANs are not trained as educators nor do they generally have the time to devout five days to the staff. Another problem is that there may not be enough clients in a health center to practice the IMCI protocols. C-G will send an IF and a Health Educator to the training offered by the MOH and Calidad en Salud en April. The training will be replicated in San Miguel for all IFs, CFs and HVs by the Educators using client simulation.

Following the IMCI protocols, the health worker will ask the caretaker if the child has had a cough or any difficulty breathing. If the answer is affirmative the health worker will count the breaths, observe the child for chest in-drawing, and listen for difficulty in breathing. If the child has any general danger sign or difficulty in breathing then the child is classified with severe pneumonia, given the first line antibiotic, and referred to the nearest referral center immediately. If the child has rapid breathing, which among children two months to 12 months is 50 or more breaths per minute and among preschool children under than one year 40 or more breaths per minute, (s)he is classified with pneumonia. Treatment protocols for pneumonia are first line antibiotics, treat the difficulty breathing, treat the high fever, provide education to the caretaker on danger signs to seek immediate treatment, and recommend a follow up visit two days later. If there is no sign of pneumonia than the child is classified as with a cold and the cough and high fever are treated with local remedies. In the case that the child's health does not improve within five days the caretaker is encouraged to bring the child back for further evaluation.

Antibiotics recommended according to the IMCI protocols are Cotrimoxazole or Amoxicillin. Cotrimoxazole is to be given every 12 hours for 7 days, and Amoxicillin is given every 8 hours for 7 days.

In the case of local bacterial infections, the treatment protocols for infant seven days to two months of age include treating the child with Cotrimoxazole depending on age and weight of the infant.

Age or Weight	Cotrimaxazole Every 12 hours for seven days.	Amoxicillin Every 8 hours for 7 days.
	Suspension 40 mg trimethoprim + 200 mg sulfametoxazol for 5 ml.	Suspension 250 mg for 5 ml.
From birth to one month of age (<3 kg)	1.25 ml	1.0 ml
From one month to two months (3 – 4 kg)	2.5 ml	1.5 ml

Quality Improvement

Health worker performance will be measured using IMCI QIV checklists similar to those developed by WHO for IMCI. These checklists will be performed by the supervisors (IFs supervising CFs and CFs supervising HVs) and will measure the health workers performance in assessment, classification, treatment and counseling. These checklists will be applied through direct observation of the health worker either through actual cases or through simulated exercises in the field.

Health education and counseling sessions of HVs in the field will be evaluated in a similar manner, which is through observation using an Individual Counseling QIV checklist. Immediate feedback is provided to the HV and recommendations for improvement are given at that time.

Supply quality will be monitored through periodic checks in the health facilities. These checks will look for expiration dates and quantity, and compared to the supply forms maintained by the corresponding staff and sent monthly to the MOH office in Huehuetenango. Expired supplies will be disposed of appropriately, in a deep pit latrine.

Availability of Supplies and Equipment

Health centers should have all essential drugs and supplies to treat pneumonia. The MOH provides the antibiotics to the centers. There have been reported problems with the availability of antibiotics in the health facilities generally occur between October and February when the government often makes cutbacks on health expenditures. Also, when there are a lot of medicines, they are sometimes used indiscriminately. During this project, IMCI training will help Curamericas and the MOH to rationalize the use of medicines while improving the inventories of medicines kept on hand at each health facility.

A barrier to receiving medications in a timely fashion is that the MOH office in Huehuetenango sends new supplies every three months through local transportation. The

project will improve this through monthly requests for supplies and hiring a truck to transport these to the field facilities.

Approach
The project's strategies for pneumonia case management are identification of sick children during home visits and in care groups; increasing mother's and caretakers knowledge regarding danger signs, improve care-seeking behaviors; educate the caretaker of the importance of following the treatment regimen; and, improve the health workers pneumonia case management following IMCI and C-IMCI guidelines.

The HVs will help increase demand and care seeking, and will change family and community practices related to pneumonia, by educating every mother in the project area on the pneumonia messages as described above. HVs will be trained to recognize the IMCI danger signs so that they can be a local resource for the mothers that they visit, as well. The CF will also coordinate through the CGs to assure that caregivers are giving full courses of antibiotics when they are indicated by a trained health worker. Prompt care seeking and feeding during illness will be emphasized in the Care Group and other educational materials.

Following their training in IMCI, the CFs' role in this intervention will be to assess and refer children with signs of pneumonia. This will greatly increase access that caregivers have to trained health workers capable of assessing a child with signs of pneumonia. (All project households should have access to a CF within one hour of their homes.) CFs will be given electronic watches so that they can count respirations of the children that they see.

All children will be tracked by CFs using their child registers. During the regular Care Group meetings, HVs will report on sick children in households that they serve so that the CF can do follow-up home visits to those mothers with sick children who have not sought advice from the CF.

The IFs will receive training in both C-IMCI, so that they can supervise the CFs, and clinical IMCI so that they can fully manage children with pneumonia (and other illnesses) that they see during the monthly health outreach posts that they will conduct. When children are found with signs of pneumonia during these outreach posts, the IF will manage the case immediately rather than referring the child to a health facility. The IF, though, will suggest that the mother follow-up with a CF in her area, and will assign a CF to follow-up on the case. Their main role in this intervention, however, will be to supervise the CF's C-IMCI skills, including management of children with pneumonia. The ADs and health facility nurses will also be trained in IMCI. The ADs and nurses will use their IMCI skills during their regular consults at the community level.

Behavior Change Communication (Pneumonia Case Management)
The following key household behaviors related to pneumonia case management will be promoted at the **household level** (amongst others):
1. Caregivers of preschool children should bring a child to a properly trained health

worker immediately when the child has rapid or difficult breathing or any of the IMCI dangers signs (i.e., looks unwell, not playing, not eating or drinking, lethargic or change in consciousness, vomiting everything, or high fever). (The KPC found that only 29% of mothers of children 0-23m [and only 14% of infants] with cough and rapid/difficult breathing sought care for their child.)

2. Caregivers of preschool children should learn to recognize all IMCI danger signs. The KPC found that only 21% of mothers could name two or more danger signs during illness.
3. Caregivers of preschool children should continue to feed and offer more fluids, including breastmilk, to children when they are sick, and increase feeding immediately after illness. (The KPC found that only 31% of children 12-23m received the same amount or more liquids when they had a cough and rapid/difficult breathing, and only 16% received the same amount or more food.)
4. Caregivers should follow health worker's advice about treatment, follow-up and referral of sick children.
5. When antibiotics are given to children, the entire course of the antibiotic should be given.
6. When antibiotics and other prescription medications are needed, the caregiver should get them from a health worker who is qualified to prescribe the medicine and counsel the caregiver in the proper use of the medicine.
7. All caregivers should know where health workers can be found who are qualified to assess and management childhood illness. Caregivers should know that IMCI-trained CFs are usually their closest trained, qualified health worker.

Health-facility and community-level health workers will also be trained in IMCI, and assessment of danger signs and counseling parents on danger signs will be given emphasis. (During the HFA, only one of the five health workers checked children for danger signs.) They will also be given (and trained in how to use) **Spanish-Chuj and Spanish-Acateca medical phrase books** to improve their assessment and classification of children with ARI, and to improve the counseling that they are able to do with parents. All health workers will be taught how to **teach parents to properly measure and administer medication** (e.g., using sun/moon medication cards).

Control of Diarrheal Disease

MOH Norms

The MOH follows the WHO IMCI and community IMCI guidelines for the control of diarrheal disease. Following these protocols the health worker will ask the caretaker if the child has had a diarrhea. If the answer is affirmative the health worker will ask further probing questions and observe the child for lethargy, unconsciousness, and sunken eyes. The health worker will offer the child liquids to drink and observe how the child drinks. Based on these questions and the health workers observations, the child's diarrhea status is classified, including the presence of dehydration or not. Once classification and severity of the case has been established, the health worker discusses the respective IMCI treatment protocols with the caretaker. Plan A treatment is for mild cases of diarrhea, Plan B for moderate cases and Plan C is for severe cases of diarrhea.

Treatment for dysentery is Cotrimaxazole, twice a day for five days, as the first line antibiotic. In the case of a classification of diarrhea with severe dehydration, the child is older than two, and there is cholera in the area, IMCI protocols recommend administering an antibiotic (Cotrimaxazole) for three days.

Children 2-5 years are dosed with Albendazole (400g) or Mebandazol (500g) twice a year to control worm loads of hookworm, ascaris, and other worms. Deworming is provided during the national "health week" vaccination campaigns conducted three times a year. The MOH also recommends that each household has at least two ORS packets in their home to prevent dehydration in a case of diarrhea.

Quality Improvement

As in the case with the pneumonia intervention, health worker performance will be measured using IMCI QIV checklists similar to those developed by WHO for IMCI. These checklists will be performed by the supervisors (IFs supervising CFs and CFs supervising HVs) and will measure the health workers performance in assessment, classification, treatment and counseling of diarrhea case management. Individual Counseling QIV checklist will be used to measure the performance of the HVs during their group and individual health education sessions.

Supply quality will be monitored through periodic checks in the health facilities. These checks will look for expiration dates and quantity, and compared to the supply forms maintained by the corresponding staff and sent monthly to the MOH office in Huehuetenango.

Availability of Supplies and Equipment

The MOH provides supplies as part of its commitment to implement IMCI activities through SIAS funding. The HFA results reported that the facilities had sufficient supplies of antibiotics but that there were always ORS packets in the health facilities. Health workers report that because of the small quantities of ORS they are no able to demonstrate to caretakers the correct preparation of ORS. Curamericas will purchase ORS packets and C/G will advocate for more ORS packets with the San Miguel Acatán MG and UNICEF, who is currently providing assistance in the municipality to improve MG capacities.

Approach

Over half of the children in the study had diarrhea during the previous two-week period, and only 18% of mothers used ORS and recommended home fluids (RHFs). 71% of children received less liquid during a recent diarrheal episode. Data from the HFA found that oral rehydration solution (ORS) was appropriately prescribed but its use was not modeled due to unavailability of ORS in the centers and health posts.

The project approach for control of diarrheal disease is that diarrhea prevention and case management is integrated into C/G's CBIO strategy during Care Groups, home visits, and clinical services. MOH IMCI and C-IMCI protocols provide guidance for diarrheal diseases. Given the high prevalence of severe malnutrition, health facility workers will

be taught how to dilute ORS for children with kwashiorkor following the new WHO manual on management of severe malnutrition[22].

Knowledge and behavior change concerning diarrhea, and improved referral and management will be achieved in several ways. During this project, children 0-5 years of age will be contacted by CFs and IFs during the monthly health outreach posts (*Jornadas*). During these posts, children will have their growth monitored, and as part of that process, mothers will be asked if their child has had diarrhea and referred when appropriate. IFs and CFs can do education on diarrhea, and refer children when necessary (e.g., when the child has dysentery or persistent diarrhea) during these health posts, as well. CFs and IFs will be trained in community and clinical IMCI, respectively.

Since it appears that one of the largest sources of diarrhea may be bottle-feeding, project staff will conduct an anti-bottle feeding campaign. BCC activities will promote exclusive breastfeeding until six months of age and complimentary feeding at six months of age using the IMCI food box to promote proper nutrition. A barrier analysis study will be conducted in the field to determine barriers to breastfeeding so that the educational messages can be tailored appropriately.

The HVs will be responsible for educating mothers using a flipchart produced by Curamericas. Mothers will be educated on the causes of diarrhea and how manage diarrhea successfully at home with more liquids, breast milk, and food, and recognition of the danger signs (including identifying the signs of dehydration) that indicate when a child should be brought to a trained health provider (i.e. CF, health post, or health center). CFs will add to this education during contacts with mothers and care givers in health outreach posts and home visits. Graphics and text from locally-produced educational materials will be used to develop the HV's flipcharts. We will also explore collaborating with radio stations to broadcast health messages on diarrhea, including messages in the languages other than Spanish that are used in the project area (e.g., Chuj).

All children will be tracked by CFs using their child registers. During the regular Care Group meetings, HVs will report on sick children in households that they serve so that the CF can do follow-up home visits to those mothers with sick children who have not sought advice from the CF.

Health staff members in the health facilities have already been trained to manage both bloody and persistent diarrhea. In order to improve case management, the project physicians, health center and health post nurses, ambulatory doctors, and Institutional Facilitators will be given a refresher in the management of bloody and persistent diarrhea as part of the Clinical IMCI training that they will receive during this project. Current protocols for referral will be included in the community IMCI training that the Community Facilitators will receive.

HVs will promote increased use of ORS and RHFs for children with diarrhea through the

[22] See http://www.who.int/nut/documents/manage_severe_malnutrition_eng.pdf

Care Groups, and will demonstrate how to prepare and administer ORS. CFs and IFs will demonstrate proper preparation and administration of ORS for caretakers of children with diarrhea. The project will assure that all health facilities, IFs, and CFs have a reliable stock of ORS packets. C/G will negotiate with the MOH and MG to provide the necessary ORS supplies. HVs will be provided two-days worth of ORS packets for their ORS packets will be replenished during the HVs' biweekly meetings with the CFs. RHFs in the area is generally a rice mixture.

Training of the CFs in community IMCI will improve equity by giving mothers a locally-available resource person when a child is sick with diarrhea. HVs and CF will be trained in nutritional counseling for the management of persistent diarrhea following the IMCI protocols included in their training manuals. Also, by having HVs visiting each caregiver of a preschool child through the Care Group strategy, equity for diarrhea education will be ensured. Follow-up of defaulters of health outreach posts during HVs' and CFs' regular home visits will help ensure equitable access to care, as well.

Hand washing, although higher than expected was still poor being that 34% of mothers of children with children less than two years of age knew when they should wash their hands. Given that hand washing with soap is associated with a decrease in risk of diarrheal disease of 47% and a 48–59% reduced risk of more severe outcomes,[23] hand washing will be heavily promoted in the Care Groups.

The Care Group curricula will be reviewed and hygienic messages will be included.

Behavior Change Communication (Control of Diarrheal Disease)
The following key household behaviors related to pneumonia case management will be promoted at the **household level** (amongst others):

1. **Exclusively breastfeeding children to six months -- avoid bottle feeding** of children. The KPC found that 44% of infants and 57% of children 12-23m were bottle-fed.
2. **Wash hands with soap after defecation, before preparing meals, and before feeding children; and dispose of feces, including children's feces, safely**. (The KPC found that only 34% of mothers of children 0-23m mentioned at least two of the four times when they should wash their hands.)
3. **Continue to feed and offer more fluids, including breastmilk to children when they have diarrhea, and increase feeding immediately after illness.** (The KPC found that 71% of the children received *less* liquid during a recent diarrheal episode, and only 21% of children received the same amount or more food.)
4. **Give children with diarrhea ORS, or appropriate home-available fluid**. (The KPC found that only 18% of mothers used ORS and home-available fluids [HAFs].)
5. (We will teach mothers and other caregivers **how to make and administer ORS** from packets correctly.)

[23] Curtis, Val and Cairncross, Sandy. (May 2003) Effect of washing hands with soap on diarrhoea risk in the community: a systematic review. The Lancet, Volume 3, Number 5.

6. **When a child has signs of dehydration or general danger signs** -- looks unwell, not playing, not eating or drinking, lethargic or change in consciousness, vomiting everything, high fever, fast or difficult breathing – **the child should be taken to a trained health worker immediately.**
7. **When a child has bloody or persistent diarrhea, care needs to be sought immediately** from trained health workers.
8. **Mothers and other caregivers should follow the health worker's advice about treatment, follow-up and referral of diarrhea.**

Health-facility and community-level health workers will also be trained in IMCI, and assessment of danger signs and counseling parents on danger signs will be given emphasis. (During the HFA, only one of the five health workers checked children for danger signs.) These health workers will also be given (and trained in how to use) **Spanish-Chuj and Spanish-Acateca medical phrase books** to improve their assessment and classification of children with diarrhea, and to improve the counseling that they are able to do with parents. Health workers will be taught to **demonstrate preparation of ORS** for mothers of children with diarrhea who are brought to a health facility, and taught the **importance of having a regular stock of ORS packets on-hand at the health facilities at all times**. Given the high prevalence of severe underweight, **all health facility workers will be taught to dilute ORS for children with kwashiorkor** (following guidance in the new WHO manual[24] on management of severe malnutrition). Since medications are sometimes used for diarrhea (e.g., with dysentery), all health workers will be taught how to **teach parents to properly measure and administer medication** (e.g., using sun/moon medication cards).

Immunizations

MOH Norms

The Guatemalan MOH vision is to improve the quality of life for women and infants through immunizations focusing on prevention, education, and permanent provision of vaccines for all of the population in Guatemala. The MOH policy favors increasing the coverage levels and epidemiological surveillance through the permanent contact and promotion of vaccine services. The MOH strives to achieve high levels of immunization coverage, maintain the reduction of the number of reported cases of polio, certify measles eradication, eliminate neonatal tetanus, and maintain low incidence rates of tetanus, Pertussis (whooping cough), diphtheria, tuberculosis, and Rubella.[25]

The new vaccination schedule in use in Guatemala is as follows: BCG at birth; Polio1 and DPT1 at 2m; Polio2 and DPT2 at 3m; Polio3 and DPT3 at 4m; MMR at 12m; 18m: 1st Polio and DPT booster; 4 years: 2nd Polio and DPT boosters. For tetanus, WRA are given 3 doses of Tda (or TT): first dose at first contact; second dose, one month later;

[24] See http://www.who.int/nut/documents/manage_severe_malnutrition_eng.pdf

[25] Lineamientos 2003 y Planificación Programa Nacional de Inmunizaciones 2003, Ministerio de Salud Publica y Asistencia Social, Dirección General de Regulación, Vigilancia y Control de la Salud, Departamento de Regulación de los Programas de Atención a las Personas, Programa Nacional Inmunizaciones, Guatemala, Noviembre 2002

third dose, six months later (with 2 doses considered coverage). Hepatitis B and Hib vaccines are not being promoted by the MOH at this time.

The MOH's strategy for immunization coverage in Guatemala is to sponsor health weeks (periodic vaccination campaigns) three times a year. During this project, C/G and MOH staff will receive training in EPI and increase coverage by training and deploying three sets of workers who are part of the MOH plan, but have not been deployed in large numbers in the project area to date: additional Institutional Facilitators (IFs (nurses), who are health-facility based), Community Facilitators (CFs, who are community based), and Health VolunteersHealth Volunteers who are also community based.

Quality Improvement
Vaccines are transported and stored according to WHO guidelines for vaccines, including maintaining a cold chain during transportation. In the health centers, health staff are responsible for recording temperature readings of each refrigerator twice daily. According to MOH protocols, if the cold chain temperature passes above 8 degrees Celsius the vaccines are disposed of. IFs have thermos and ice packs to transport the vaccines. Vaccines are returned the same day to the health centers and returned to the refrigerator.

Child health cards (growth monitoring card) will be reviewed during each contact between a health worker and preschool child to monitor his(her) immunization status. Immunization records for each child will also be maintained by the IFs and CFs. The project will use the observational tool of QIV checklists to monitor and improve the immunization activities in the field and in a health facility. The IFs will be responsible for providing feedback to the CFs and providing follow-up monitoring on a regular basis.

Availability of Supplies and Equipment
Immunization supplies are being supplies to the project from the MOH as part of the EPI program. The supplies include the syringes, iceboxes, ice packs, vaccines, and the child health cards. During the HFA there were no facilities that reported stock outs of vaccines or immunization supplies.

Health centers with gas and/or electric refrigerators include San Miguel Acatán, San Sebastian Coatán, San Jose and San Rafael la Independencia. The health facility in Santa Domingo currently does not have a refrigerator thus vaccines must be transported from one of the other health centers to Santa Domingo on the day vaccine activities are programmed. In 2003, the MOH will provide a gas refrigerator with extra gas tanks for Santa Domingo so that immunization activities can be offered daily. Syringes and medical waste is disposed of in hard plastic, puncture resistant containers and the health workers are trained to dispose of these containers in pit latrines. In the field, cold boxes, insulated vaccine carriers, and thermos flasks will be used to maintain refrigeration during visits to each community.

Immunization training will be provided in the first half of the project year (March 2003). The course was five days in duration and contained training on universal precautions to

avoid exposure to blood borne pathogens, cold chain management, vaccine logistics (i.e. transportation, storage, and supply management), vaccine preventable illnesses, and disposal of medical waste. A refresher training in vaccines will be held in year 3 of the project and be conducted by C/G Community Educators.

Approach

The objectives and targets for immunization are provided in Section 4. Work Plan. The two principle strategies for achieving the targets are providing vaccinations in the health facilities and through the monthly outreach posts. Project staff will focus on immunizing all children before their first birthday, yet preschool children older than one who are not fully immunized also will be vaccinated. Vaccines will include all of those promoted by the MOH: BCG, DPT, Polio, Measles, and TT. Immunization schedules will follow the MOH protocols for immunization. Women of childbearing age will be invited to the health outreach posts and health facilities to receive immunization with TT vaccine. TT vaccination days will also be held periodically in area churches and schools in order to boost coverage. Vitamin A supplementation as well as growth monitoring and other activities will be included during the health outreach posts when immunizations are given.

Preschool children and women will also be immunized during their regular visits to the health posts and health centers in the project area. There will not be specific "immunization days" at the health centers: vaccines will be provided every day that the health centers and health posts are open so that no opportunity to vaccinate a child is missed. MOH health centers and health posts are open Monday through Friday and closed on the weekends.

All children will be tracked by CFs using their child registers, and the infants and children who fail to receive their vaccinations on schedule will receive a home visit from a HV or CF who will motivate the caregiver to attend the health outreach posts. (HVs will make the first contact with defaulters. CFs will visit those who continue to default.) Immunizations will be recorded on the mother's and CF's copy of the growth chart/immunization card, as well. The CFs will keep simple records on suspected cases of vaccine-preventable diseases (and other illnesses) in the communities that they serve. These records will be collated by the CFs and aggregated in the health facilities. The IFs and CFs will be trained to gather appropriate data on this for the HIS. The analysis of the data, as well as projected immunization levels, will be shared periodically with appropriate MOH offices and the other community groups. By having HVs visiting each caregiver of a preschool child through the Care Group strategy, equity for immunization education will be ensured. Follow-up of defaulters of health outreach posts during HVs' and CFs' regular home visits will help ensure equitable access to immunization services, as well.

TBAs that will be trained as part of this project will learn to promote TT immunization of pregnant women and WRA with whom they have regular contact. They will receive a small flipchart for this purpose.

A five-day PAHO course on immunization will be provided by the MOH during Year One of the project for IFs and health center nurses. This training includes universal precautions to avoid exposure to blood-borne pathogens, management of the cold chain, storage and transportation of the vaccine, recording and monitoring temperature control, and surveillance of vaccine-preventable disease. The Education Coordinator will conduct in-services, as necessary.

Mothers and other caregivers in the project area will be educated on the importance of infants receiving a full course of all vaccines before their first birthday; the importance of women having a complete course of TT; and that pregnant women and WRA should seek TT vaccine at every opportunity.

Behavior Change Communication (Immunization)
All caregivers of young children will receive education at the **household level** through the Care Groups on: the importance of vaccines; the importance of infants receiving a full course of all vaccines before their first birthday; the importance of women having a complete course of TT; that infants should be taken for immunization even if they are sick; that pregnant women and that WRA should seek TT vaccine at every opportunity; at what age each vaccine is given; and which diseases each vaccine prevents. Curamericas will include educational messages that speak directly to cultural fears about immunizations, and will work to gain all pastors and priests approval for immunizations by including them in our educational outreach.

Following IMCI training, **health workers will be encouraged to consistently use the vaccine charts to determine if children are up-to-date on their vaccines**. (During the HFA, it was found that these are not always found, and that some opportunities were missed for vaccination.)

Organizational Development

Curamericas Capacity Building
In lieu of the Organizational Capacity Development Assessment Tool, Curamericas conducted an Institutional Strengthening Assessment (ISA) with guidance and facilitation provided by Eric Sarriot of CSTS and Karla Percy, Independent Consultant. This tool is implemented with input from field programs and a self-assessment meeting of the health unit staff. After the meeting the results of the field and self-assessments' were analyzed, the field reviewed the outcomes and developed recommendations and strategies to improve the health unit.

Curamericas initial results show that the organization's technical knowledge and skills are generally high in both HQ and field offices. Weaker areas identified were providing the appropriate level of support for operational research and sustainability. Overall, the organization feels that its programs and projects receive a high degree of guidance and support to continuously improve the quality of health interventions.

In the area of management practices and governance, both HQ and Field level staff require additional training in project management and additional technical assistance regarding interpretation and compliance with donor regulations. HQ assessments of administrative procedures were high, however field staff felt that procedures were not frequently reviewed and updated. Field staff and HQ both assessed that field-based project managers needed additional training and technical support in the use of computer software and hardware, and a better system of electronic communication was needed. Scores for financial and human resource management were strong revealing the resources are transferred to the field in a timely manner and that quality staff are retained to support the health programs.

Curamericas Capacity Building Objectives and Indicators
Curamericas has identified key objectives and indicators based on the results of the ISA and the strategic direction of the organization to work in a "franchise" model. These objectives are included in Section 4. Work Plan.

Curamericas' Executive Director and Senior Program Specialist are identifying new country initiatives in the Latin America and Caribbean region as well as with the Hispanic community in the United States. The HQ office is restructuring to integrate and standardize program initiatives and materials. As part of this Curamericas has added a full-time Program Specialist to its' HQ who will lead the efforts to develop program training and educational materials for use with its' partners.

In the next five years, Curamericas will be hiring a development associate who will lead the organization's efforts to increase charitable gifts from current and new donors; identify new funding opportunities; develop donor activities in Curamericas' major donor territories; and, coordinate new grant proposals. Program staff will be responsible for identifying program-specific foundation grants and will work with the new development associate in writing competitive grant proposals.

Specific capacity building objectives and indicators are included in ***Section 4. Work Plan***.

Local Capacity Strengthening
<u>Curamericas Guatemala Capacity Development</u>
In an initial assessment of Curamericas Guatemala, the staff feel that they have good systems in place keeping lines of communications open with staff members of C/G. There is a staff meeting at the end of the month. They had initially planned to meet twice a month, but due to the amount of time spent and the hardship involved in traveling between the project sites, it is not practical to meet more than once a month. Staff trainings are scheduled to coincide with staff meetings, so that staff members often spend two days together, but only have to travel once a month.

Staff meetings use a written agenda, and minutes are kept. Memos, letters and reports are used. Programmatic progress reports will be shared with staff after the detailed

implementation plan is completed. Monthly progress reports will be sent to Curamericas (in the U.S.) beginning in April 2003.

Communication between the U.S. and the Guatemala offices can at times be difficult and frustrating. Email doesn't always function. The CSPC is often unreachable when he is working in the field. His cell phone only functions in some locations. The field office is San Miguel Acatan does not have a phone line or fax. Email can be received in the Quetzaltenango office, but not in San Miguel. There is another office that rents use of its phone and fax to Curamericas, but service is not reliable. The secretary in the Quetzaltenango office speaks with the CSPC every day; he goes to a location where there is a phone, or where he can use his cell phone, and check in. She passes messages to him, so if someone urgently needs to reach him communication can usually take place within one or two days. The secretary can also send a disk or package to the field office by a courier truck or bus if necessary. But, due to the difficulties it works best to plan ahead and avoid emergencies.

Employees have written contracts, and written job descriptions, which are reviewed together by employee and supervisor. Employees receive training usually on a monthly basis. There is a regular inventory of assets maintained by the IT specialist, who is also responsible for maintenance of office equipment. A paper filing system exists and is kept up to date.

Internet access is available in internet cafés at a speed of 128 kb/sec. At the office in Salcaja, Quetzaltenango the speed is 56 kb/sec. Internet access is not currently available at the office in San Miguel Acatán. There are two computers with internet access, in Salcaja, and five computers in San Miguel, without internet access. Key personnel are competent in internet navigation and the use of email. Four staff members have e-mail accounts, seven do not. The IT specialist will be teaching other staff members to use e-mail.

Staff members have two cell phones, but cannot usually get a signal from the office in San Miguel Coatan. There is a rented fax service at a nearby office in San Miguel. There are two phone lines in the Salcaja office. The staff does not have access to an LCD projector, but would very much like to acquire one, or have access to one, for trainings and fund raising presentations. There is an overhead projector, and five laser printers. A copy machine in a nearby office is used for a fee per copy. There is a scanner in the office. Windows XP is installed on all computers, along with Microsoft Office 97 or later. Key personnel use Microsoft Word, Excel, Outlook, Internet Explorer, and Power Point. The IT specialist and project director are very comfortable and skilled in the use of MS Office Word applications. The project director needs more training on Excel. Staff members are not comfortable using any version of Epi-Info, and would like to be trained in the use of Epi-Info. The IT specialist uses graphics software, and graphing software. No nutritional analysis software is in use.

There are forms available and accessible in the office for mileage, expense reports, and technical reports. Forms for financial reports and for statistical reports need to be

developed. Ministry of Health report forms are available. Travel expense reporting is done with receipts.

Curamericas Guatemala needs support and assistance in administration and financial reporting. There are good systems in place for communications and staff training, despite challenging barriers (lack of phone lines, no satellite signal in some locations for cell phone use and difficult and time consuming transportation). Curamericas Guatemala is specifically requesting training in the use of Epi-Info, and is very receptive to receiving assistance with developing financial, administrative, and technical reporting systems.

Curamericas will build the capacity of C/G in at least the following areas during the life of this project: 1) project management; 2) financial management and reporting; 3) technical health interventions; and 4) project monitoring and evaluation. These capacities will be strengthened through regular and constant contact with staff, training in selected themes, and on-going management and monitoring of their activities.

Specific capacity building objectives and indicators are included in ***Section 4. Work Plan***.

Capacity Building of Other Local Partners

Although the partnership between Curamericas and FUMESDER has been redefined, Curamericas will continue to collaborate and provide training to FUMESDER's Board in: Board membership development; long-range strategic planning; and, overall program management experience to FUMESDER and its local Board of Directors. Additionally, Curamericas will assist FUMESDER with securing funding for new initiatives that meet their organizational objectives. While Curamericas mentors FUMESDER's institutional development, Curamericas will encourage FUMESDER's continued participation in the CS-18 program, enabling them to leverage additional community development and health programs based on their experience and growth under the CS-18 program

As part of this project Curamericas also will provide training other local partners of this project. As mentioned in previous sections, this project will work in coordination with the MOH in the health districts. The MOH sets overall policies and direction of the sector. This project compliments MOH/SIAS structure mentioned in the Program Approach and will utilize key MOH district staff to implement the activities. Training activities will be coordinated with the MOH and MOH staff will be encouraged to participate in all of the trainings. Monthly coordination meetings will be scheduled for all staff and partners (i.e. MOH, municipal government, ASSDI).

In the third year Curamericas will collaborate with ASSDI who is working in San Rafael providing basic health services. These partners will participate in the monthly coordination meetings and their staff members will be trained in the topics listed in **Annex G**.

Cooperative agreements with FUMESDER and the MOH district office in San Miguel are provided in **Annex Q**.

Sustainability

Curamericas defines sustainability as the state in which the local project partners (including Care Group members) are able to maintain clearly defined, high quality health benefits indefinitely, based upon their own capacity to generate and manage the necessary resources and services, in conjunction with community leadership and participation.

Curamericas has chosen to work with marginalized communities in an area that was greatly affected for more than thirty years by the Guatemala Civil War. This population will not be able to generate all of the resources needed to support adequate and/or ongoing primary health care, at least in the near term. In order to have a sustainable health system it is important to have the following elements: an adequate flow of resources; a product that is necessary or demanded; the technical knowledge to provide the product; an organizational structure that provides leadership, accountability, clear decision making, and shared goals and objectives; and, a sense of ownership by the community and the health services.

The sustainability of health benefits and status within the population will depend on three elements: changes in knowledge and practices of family members; systematic attention to assuring the continued quality of health services provided through local facilities; and, increased financial and technical support provided locally (e.g.. MOH and municipal government) and by the PVO.

The MOH has made a strong commitment to improving access to health care and provides all essential medications and supplies as part of its' SIAS program free of charge. Curamericas believes that the Guatemalan government has invested heavily in expanding health care to underserved regions and will continue to do so in the future.

Curamericas Care Groups will eventually be able to supplant much of the need for CFs over the long run by taking on their health promotion role. Studies in Mozambique, where Care Groups have been used, found that a full thirty months after the end of the Care Group project Care Groups were still meeting: Ninety-three percent of Care Group members were active twenty months after the project closed. Furthermore, the participants continued to exceed the final program goals on eight key indicators. Not only were there steep increases from baseline levels seven years earlier, but changes went well beyond individual behaviors to changes that necessarily involved community-bases services by volunteers (e.g., number of children being weighed and mothers receiving nutritional counseling) and sustained services by the MOH at the local level (e.g., malaria treatment, use of modern family planning methods, and completed immunizations).

C/G project staff will devote their time to participating in MOH and MG meetings, and advocate for increased local resources. C/G will participate in the monthly Municipal Development Council meetings where they will share project data and advances, and coordinate efforts to improve local services. It is expected that through these meetings

local authorities will begin to delegate funds for health activities in their areas. Curamericas foresees that the Municipal Governments may provide funds for gas and maintenance of project vehicles, and contributions to an emergency transportation fund. Project staff also will use these meetings to encourage the MG to advocate for more MOH resources for the area and a more timely distribution of supplies in the case that the project is experiencing any shortages or stock-outs of essential medicines.

Curamericas HQ will provide extensive technical and administrative assistance to C/G develop its capacity to administer maternal health, child survival and primary health care services, including the planning, implementation, monitoring and evaluation of the CBIO methodology. (See the Project Activities Timeline in **Annex F** for a detailed plan of activities.) C/G will work with the Guatemalan MOH and receive ongoing support for its community-based strategies through the Guatemalan MOH for supplies, medicines and equipment. These supplies will be given a financial value and tracked as part of the MOH commitment to child survival activities.

Curamericas is assuming that over the coming years, recurring costs such as rent and electricity of the local offices will be covered by local funds. The MOH district of San Miguel is currently providing office space for this project in their health center. The project has initiated discussions with the San Miguel MG to provide minimal support for the purchase of gas and maintenance of the project motorcycles. All costs that C/G recovers through local sources such as the MOH or MGs will be recorded and tracked over time to measure any changes in increased local project support.

In year two of the project, Curamericas will conduct a local demand study and explore opportunities to build a fee-for-service clinic in the project area. The objectives of these clinics are: to serve as "profit centers" for high demand health services; to cross subsidize community outreach health services; and, to serve as reference facilities for selected cases identified by community health workers.

A list of project sustainability objectives are included in the project **Work Plan (Section 4**).

4. WORK PLAN

Nutrition and Micronutrient Supplementation/Promotion of breastfeeding (30%)

Objective #1: Improve child nutritional status **Objective #1.1**: Decrease the percentage of children age 0-23 months who are underweight from 43% to 34%			
Indicator 1.1: Percentage of children 0-23 months who are underweight *Measurement method: KPC surveys at baseline and final: monitoring of nutritional status using HIS*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household Use child health register to systematically and routinely follow-up children	March 2002 – Sept. 2007	CFs and HVs	
Monitor child's growth through routine weighing of children	Dec. 2002 – Sept. 2007	CFs and HVs	
Nutritional counseling to caretakers in the home	July 2003 - Sept. 2007	CFs and HVs	Baseline:43% Year 1: 40% Year 2: 40% Year 3: 38% Year 4: 36% Target: 34%
Community Community education during Care Groups	July 2003 – Sept. 2007	CFs and IFs	
PD study and TIPS to improve nutrition education methods	Oct. – Nov. 2003	CFs and IFs	
Use of behavior box to monitor mothers' practices	March 2003 – Sept. 2007	CFs and IFs	
Deworming during Care Groups			
Health Facility Growth monitoring and nutritional counseling in the clinic	Dec. 2003 – Sept. 2007	IFs, ANs and ADs	
District Coordinate with MOH in Huehuetenango for IMCI training	July 2003		

Objective #1: Improve child nutritional status **Objective Indicator #1.2**: Increase the Ppercentage of children age 0-5 months who wereare exclusively breastfed during the past 24 hours: *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys* from 63% to 80%			
Indicator: Percentage of children 0-5 months who were exclusively breastfed during the past 24 hours *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household Training in IMCI	January 2004	IFs, CFs, and HVs	
Nutritional counseling to caretakers in the home	July 2003 - Sept. 2007	HVs and CFs	
Promotion of exclusive breastfeeding during home visits	July 2003 - Sept. 2007	HVs and CFs	
Community Community education during Care Groups	July 2003 – Sept. 2007	CFs and IFs	Baseline: 63% Year 1: 70% Year 2: 73% Year 3: 75% Year 4: 78% Year 5: 80%
TIPS to improve nutrition education methods	Oct. – Nov. 2003	CFs and IFs	
Barrier analysis study conducted	Oct. – Nov. 2003	CFs and IFs	
Health Facility Promotion of exclusive breastfeeding in the clinic	Dec. 2002 – Sept. 2007	IFs, ANs and ADs	
Training of health facility workers in IMCI	July 2003	IFs, ANs and ADs	
District Coordinate with MOH in Huehuetenango for IMCI training	July 2003		

Objective #1: Improve child nutritional status **Objective Indicator #1.3**: Increase the percentage of mothers of children 0-23 m who received a Vitamin A dose during the first two months after delivery from 0% to 60% *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Indicator: Percentage of mothers of children 0-23m who received a Vitamin A dose during the first two months after delivery *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household Promotion of Vitamin A to WRA	Aug. 2003 – Sept. 2007	CFs and HVs	
Community Training of TBAs in administration of Vitamin A	Aug. 2003	ADs/ANs	
Vitamin A supplementation during monthly health posts	Aug. 2003 –Sept. 2007	TBAs	Baseline: 0% Year 1: 30% Year 2: 40% Year 3: 50% Year 4: 55% Year 5: 60%
Vitamin A provided to TBAs	Aug. 2003 – Sept. 2007	IFs	
Health Facility Administration of Vitamin A during clinic visits	Aug. 2003 – Sept. 2003	ADs, ANs, and IFs	

Maternal and Neonatal Health (25%)

Objective #2: Improve antenatal care coverage **Objective #2.1**: Increase the percentage of mothers who had at least two prenatal visit (card) with a trained health provider prior to the birth of her youngest child less than 24 months from 25% to 40%			
Indicator #2.1: Percentage of mothers who had at least one prenatal visit (card) with a trained health professional prior to the birth of her youngest child less than 24 months of age *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household Home visits to identify pregnant women and encourage them to seek services	March 2002 – Sept. 2007	CFs and HVs	
Surveillance activities during collection of vital event data	March 2002 – Sept. 2007	CFs and HVs	
Coordination with TBAs, CFs and HVs to identify pregnant women	Dec. 2002 – Sept 2007	TBAs, CFs and HVs	Baseline: 25% Year 1: 28% Year 2: 30% Year 3: 33% Year 4: 36% Target: 40%
Community Promotion of prenatal services during Care Groups	Dec. 2002 – Sept 2007	IFs, CFs and Educ. Coordinators	
Health Facility Promotion of prenatal services during clinic visits	Dec. 2002 – Sept 2007	IFs, ADs and ANs	
Prenatal care services during clinic hours	Dec. 2002 – Sept 2007	ADs and ANs	

Objective #3: Assure all deliveries are safe deliveries **Objective #3.1**: Increase the percentage of children age 0-23m whose births are attended by skilled health personnel (nurse, auxiliary nurse, or MD) from 9% to 18%			
Indicator #3.1: Percentage of children age 0-23m whose births were attended by skilled health personnel *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household Promotion of use of trained TBAs during home visits	March 2004-Sept. 2007	HVs and CFs	
Training of TBAs	March 2004 – Sept. 2007	TBAs, ADs and ANs	Baseline: 9% Year 1: 10% Year 2: 12% Year 3: 14% Year 4: 16% Target: 18%
Community Promotion of using trained TBAs during Care Groups	March 2004-Sept. 2007	CFs, IFs and Educ. Coord.	
Health Facility Training of Trainers for those training TBAs	Jan. 2004 – Feb. 2004	ADs, ANS and Educ. Coord.	
Deliveries provided in health facilities	Oct. 2002 – Sept. 2007	ADs and ANs	
District Construction of birthing centers in select communities using volunteer work teams	2004 – 2007	CSPC	

Child Spacing (10%)

Objective #4: Adequate child spacing **Objective #4.1**: Increase the percentage of (nonpregnant) mothers who desire no more children in the next two years, or are not sure), who are using a modern method of child spacing from 21% to 31% Assure adequate child spacing for all mothers.			
Indicator #4.1: Percentage of non-pregnant mothers who desire no more children in the next two years, or are not sure, who are using a modern method of child spacing *Measurement Method*: *KPC surveys at baseline and final:*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household Maintenance of a women's registry with family planning data to identify women who are and are not using family planning methods	July 2003 – Sept. 2007	CFs and HVs	
Education of WRA and their partners on child spacing	July 2003 – Sept. 2007	CFs and HVs	
Community Promotion of child spacing during Care Groups	July 2004 – Sept. 2007	CFs, IFs amd Educ. Coord.	Baseline: 21% Mid-term: 25% Year 5: 31%
Training of CFs and IFs in child spacing methods and counseling	June 2004	CFs and IFs	
Health Facility Retraining of clinical staff in child spacing methods and counseling skills	June 2004	ADs, ANs and IFs	
Provision of family planning methods	Oct. 2002 – Sept. 2007	ADs and ANs	
District Provide family planning methods to health facilities			

Objective #4: Adequate child spacing **Objective Indicator #4.2**: Increase the percentage of mothers who know at least one place where she can obtain a method of child spacing from 41% to 65% *Measurement Method*: *KPC surveys at baseline and final and Rotating Mini-KPCs*			
Indicator #4.2: Percentage of mothers of children 0-11m who report at least one place where she can obtain a method of child spacing *Measurement Method*: *KPC surveys at baseline and final:*			
Major Activities	**Time Period**	**Personnel**	**Baseline Targets**
Household Promotion of child spacing among WRA and their partners	July 2003 – Sept. 2007	CFs and HVs	
Development and implementation of child spacing education materials for HVs	April – Sept. 2004	Educ. Coord.	Baseline: 41% Mid-term: 53% Year 5: 65%
Community Promotion of child spacing during Care Groups	July 2003 – Sept. 2007	CFs and IFs	
Develop education materials on child spacing for use with Care Groups	April – May 2004	Educ. Coord.	
Health Facility Strategically place family planning educational materials (e.g. posters, brochures) in the health facility	Oct. 2002 – Sept. 2007	ADs, ANs, and IFs	
District Provision of IEC materials			

Pneumonia Case Management (15%)

Objective #5: Assure appropriate case management of common childhood illnesses **Objective #5.1**: Increase the percentage mothers of children age 0-23 months with cough and fast /difficult breathing who were taken to a health facility or who received antibiotics from an alternative source from 29% to 50%			
Indicator #5.1: Percentage of mothers of children 0-23m with cough and fast / difficult breathing who were taken to a health facility or who received antibiotics from an alternative source *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household			
Training in IMCI	January 2004	CFs and HVs	
Development and training in use of Educational modules	Aug. – Sept. 2003	Educ. Coord., HVs, and CFs	
Prioritize key education messages during home visits using the education modules	Sept. 2003 – Sept. 2007	HVs and CFs	**Baseline: 29%** Year 1: 33% Year 2: 37% Year 3: 41% Year 4: 46% Year 5: 50%
Use of verification checklists to supervise IMCI activities	Aug. 2003 – Sept. 2007	CFs and IFs	
Community			
Development of Educational modules	Aug. – Sept. 2003	Educ. Coord.	
Education of mothers on the signs of pneumonia and appropriate care seeking behavior during Care Groups	Sept. 2003 – Sept. 2007	CFs and IFs	
Health Facility			
Clinical IMCI training	June 2003	ADs, ANs, and IFs	
Implementation of IMCI in health facilities	July 2003 – Sept. 2007	ADs, ANs, and IFs	
Implementation of IMCI supervision protocols	Aug. 2003 – Sept. 2007	ADs, ANs, IFs, and Educ. Coord.	
District			
Coordinate with the MOH office in Huehuetenango for training in IMCI			

Control of DiarhealDiarrheal Disease (10%)

Objective #5: Assure appropriate case management of common childhood illnesses (continued) **Objective #5.2**: Increase the percentage of children 0-23m with diarrhea who were given the same amount or more liquids during the illness from 29% to 50%			
Indicator #5.2: Percentage of children 0-23m with diarrhea who are given the same amount or more amount of liquids during the illness *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household			
Training in IMCI	January 2004	CFs and HVs	
Promotion of proper management of diarrhea	Dec. 2002- Sept. 2007	HVs and CFs	
Development and training in use of Educational modules	Aug. – Sept. 2003	Educ. Coord., HVs, and CFs	
Prioritize key education messages during home visits using the education modules	Sept. 2003 – Sept. 2007	HVs and CFs	**Baseline: 29%** Year 1: 33% Year 2: 37% Year 3: 41% Year 4: 46% Year 5: 50%
Community			
Development and utilization of Educational modules for use with Care Groups	Aug. 2003 – Sept. 2007	CFs, IFs and Educ. Coord.	
Promotion to mothers and caretakers on the proper management of diarrhea during Care Groups	Dec. 2002 – Sept. 2007	CFs and IFs	
Health Facility			
Clinical IMCI training	Sept. 2003 – Sept. 2007	ADs, ANs, and IFs	
Implementation of IMCI in health facilities	June 2003	ADs, ANs, and IFs	
Implementation of IMCI supervision protocols	July 2003 – Sept. 2007	ADs, ANs, IFs, and Educ. Coord.	
District			
Coordinate with the MOH office in Huehuetenango for training in IMCI			

Objective #5: Assure appropriate case management of common childhood illnesses (continued) **Objective #5.3**: Increase the percentage of children age 0-23m with diarrhea who receive oral rehydration solution (ORS) and/or recommended home fluids (RHF) from 18% to 42% *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Indicator #5.3: Percentage of children 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids (RHF) *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household			
Promotion of proper management of diarrhea	Dec. 2002- Sept. 2007	HVs and CFs	
Development and training in use of Educational modules on diarrheal mgmt.	Aug. – Sept. 2003	Educ. Coord., HVs, and CFs	
Prioritize key education messages during home visits using the education modules	Sept. 2003 – Sept. 2007	HVs and CFs	Baseline: 18% Year 1: 24% Year 2: 28% Year 3: 33% Year 4: 38% Year 5: 42%
Distribution of ORS to HH	Oct. 2003 - Sept. 2007	CFs and HVs	
ORT promotion/demonstration by HVs during their regular home visits	Oct. 2003 – Sept. 2007	HVs	
Community			
Development and utilization of Educational modules for use with Care Groups	Aug. 2003 – Sept. 2007	CFs, IFs and Educ. Coord.	
Promotion to mothers and caretakers on proper management of diarrhea illness during Care Groups	Dec. 2002 – Sept. 2007	CFs and IFs	
ORT promotion/demonstration during monthly health outreach	Dec. 2002 – Sept. 2007	IFs and CFs	
Health Facility			
Implementation of IMCI in health facilities	July 2003 – Sept. 2007	ADs, ANs, and IFs	
Implementation of IMCI supervision protocols	Dec. 2002 – Sept. 2003	ADs, ANs, IFs, and Educ. Coord.	
ORT promotion/demonstration in the clinic	Aug. 2003 – Sept. 2007	ADs, ANs, and IFs	

Integrated Management of Childhood Illness

Objective #5: Assure appropriate case management of common childhood illnesses (continued) **Objective #5.4**: Increase the percentage of mothers of children age 0-23 months who know at least two signs of childhood illness that indicate the need for treatment from 24% to 75%			
Indicator #5.4: Percentage of mothers of children age 0-23 months who know at least two signs of childhood illness that indicate the need for treatment . *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household			
Training in IMCI	January 2004	CFs and HVs	
Development and training in use of Educational modules for common child illnesses	Aug. – Sept. 2003	Educ. Coord., HVs, and CFs	
Prioritize key education messages during home visits using the education modules	Sept. 2003 – Sept. 2007	HVs and CFs	
Community			**Baseline: 24%**
Development of Educational modules for common child illnesses	Aug. – Sept. 2003	Educ. Coord.	Year 1: 35% Year 2: 45% Year 3: 55%
Education of mothers on the signs of pneumonia and appropriate care seeking behavior during Care Groups	Sept. 2003 – Sept. 2007	CFs and IFs	Year 4: 65% Year 5: 75%
Health Facility			
Clinical IMCI training	June 2003	ADs, ANs, and IFs	
Implementation of IMCI in health facilities	July 2003 – Sept. 2007	ADs, ANs, and IFs ADs, ANs, IFs, and Educ. Coord.	
Implementation of IMCI supervision protocols	Aug. 2003 – Sept. 2007		
District			
Coordinate with the MOH office in Huehuetenango for training in IMCI			

Objective #5: Assure appropriate case management of common childhood illnesses (continued)
Objective #5.5 O % of health facilities will not have had a stock-out of essential medications/supplies in the previous month

Indicator #5.5: Proportion of health facilities that have had a stock-out of essential medications/supplies in the previous month
Measurement Method: *Yearly assessment of HFA indicators.*

Major Activities	Time Period	Personnel	Baseline/Targets
Health Facility			
Clinical IMCI training	June 2003	ADs, ANs, and IFs	
Implementation of IMCI in health facilities	July 2003 – Sept. 2007	ADs, ANs, and IFs	
Implementation of IMCI supervision protocols	Aug. 2003 – Sept. 2007	ADs, ANs, IFs, and Educ. Coord.	**Baseline 20%** MTE: 0% Year 5: 0%
District			
Coordinate with the MOH office in Huehuetenango for training in IMCI			

Objective #5: Assure appropriate case management of common childhood illnesses (continued)
Objective #5.6: 80% of health workers score greater than 80% on IMCI checklist in the past quarter

Indicator 5.6: Percentage of health workers who score greater than 80% on the IMCI checklist in the past quarter
Measurement Method: Review of IMCI checklists

Major Activities	Time Period	Personnel	Baseline/Targets
Training of health workers in IMCI	June 2003	IFs, ADs, ANs, and Educ. Coord.	
Training of IFs, CFs, and HVs in community IMCI	Jan. 2004	IFs, CFs, and HVs	
Training of supervisors in verification checklists	July 2003	Educ. Coord., IFs, and CFs	Baseline: 0 Year 2: 40%
Application of the IMCI verification checklists on a quarterly basis	July 2003 – Sept. 2007	Educ. Coord., IFs, and CFs	Year 3: 60% Year 4: 70% Year 5: 80%

Objective #5: Assure appropriate case management of common childhood illnesses (continued)

Objective #5.7: 90% or more of the health facility workers and CFs will correctly assess danger signs in sick children

Indicator 5.7: Percentage of health facility workers and CFs will correctly assess danger signs in sick children

Measurement Method: Direct observation records and scores on QICL

Major Activities	Time Period	Personnel	Baseline/Targets
Training of health workers in IMCI	June 2003	IFs, ADs, ANs, and Educ. Coord.	
Training of IFs, CFs, and HVs in community IMCI	Jan. 2004	IFs, CFs, and HVs	Baseline: 0 Year 2: 40% Year 3: 60% Year 4: 75% Year 5: 90%
Training of supervisors in verification checklists	July 2003	Educ. Coord., IFs, and CFs	
Application of the IMCI verification checklists on a quarterly basis	July 2003 – Sept. 2007	Educ. Coord., IFs, and CFs	

Objective #5: Assure appropriate case management of common childhood illnesses (continued)

Objective #5.8: 100% of the health facility workers and CFs will have received a supervision at least once in the last three months using verification checklists

Indicator #5.8: Percentage of health facility workers and CFs will correctly assess danger signs in sick children

Measurement Method: Review of verification checklists

Major Activities	Time Period	Personnel	Baseline/Targets
Development of a supervision plan	Oct. 2002 – April 2003	CSPC and Curamericas Program Specialist	Baseline: 0 Mid-term: 70% Year 5: 100%
Supervisors trained in use of verification checklists	July 2003	CFs, IFs, ADs, Educ. Coord.	
Implementation of routine supervision of health facility workers and CFs	Aug. 2003 – Sept. 2007	HVs, CFs, IFs, Educ. Coord., ADs, and ANs	

Immunizations (10%)

Objective #6: Timely and complete immunizations of young children **Objective #6.1:** Assure Increase the percentage of children age 13-23 months who were fully vaccinated (against the five vaccine-preventable diseases) before they are 13m of agetimely and appropriate immunization of young children from 42% to 75%			
Indicator #6.1: Percentage of children age 13-23 months who were fully vaccinated (against the five vaccine-preventable diseases) before they are 13m of age *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household			
Maintenance of child registries with EPI data to find defaulters	July 2003 – Sept. 2007	HVs and CFs	
Home visits to defaulters by HVs to encourage vaccination during health outreach posts	July 2003 – Sept. 2007	HVs	Baseline: 42% Year 1: 55% Year 2: 60% Year 3: 65% Year 4: 70% Year 5: 75%
Promotion of immunization activities in the HH	Dec. 2002 – Sept. 2007	HVs and CFs	
Development and utilization of the educational modules on immunization	March 2003-Sept. 2007	Educ. Coord., CFs and HVs	
Community			
Promotion of immunization activities during Care Groups	Dec. 2002 – Sept. 2007	CFs and IFs	
Vaccinations provided during health outreach posts	Dec. 2002 – Sept. 2007	IFs	
Health Facility			
EPI activities promoted in the health facilities	Oct. 2002 – Sept. 2007	ADs, ANs, and IFs	
Immunization Training	March 2003	ADs, ANs, and IFs	
District			
Provision of vaccines and supplies, including cold chain, for the health facilities			

Objective Indicator #6: Timely and complete immunizations of young children **Objective Indicator #6.2**: Increase the percentage of mothers of children age 0-23 months who receive at least two tetanus toxoid injections before the birth of the youngest child from 16% to 28% *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Indicator #6.2: the percentage of mothers of children age 0-23 months who receive at least two tetanus toxoid injections before the birth of the youngest child *Measurement Method*: *KPC surveys at baseline and final: Rotating Mini-KPC surveys*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Household			
Maintenance of women's registries with vaccination data	July 2003 – Sept. 2007	HVs and CFs	
Promotion of immunization activities in the HH	Dec. 2002 – Sept. 2007	HVs and CFs	Baseline: 16% Year 1: 18% Year 2: 20% Year 3: 23%
Development and utilization of the educational modules on immunization	March 2003-Sept. 2007	Educ. Coord., CFs and HVs	Year 4: 25% Year 5: 28%
Community			
Promotion of TT activities during Care Groups	Dec. 2002 – Sept. 2007	CFs and IFs	
Vaccinations provided during health outreach posts	Dec. 2002 – Sept. 2007	IFs	
Health Facility			
TT activities promoted in the health facilities	Oct. 2002 – Sept. 2007	ADs, ANs, and IFs	
Immunization Training	March 2003	ADs, ANs, and IFs	
District			
Provision of vaccines and supplies, including cold chain, for the health facilities			

Capacity Building

Objective #7: Improve Institutional Capacities **Objective #7.1:** Increase private charitable donations at headquarters from $137, 225.00 to $164, 670 over five years.Improve Curamericas capacity to conduct child survival activities			
Indicators #7.1: Percent increase of private charitable grant income received at HQ *Measurement Method: Review of annual Curamericas financial records.*			
Major Activities	***Time Period***	**Personnel**	**Baseline/ Targets**
Hire a development associate to steward current donors and cultivate new prospects. Develop donor cultivation activities for major donors in TX, NC, TN, and CA. Strictly adhere to new Board of Director membership requirements that include yearly HQ gift solicitation.	Oct. 2003 - Sept. 2004 Oct. 2003 – Sept. 2007 Oct. 2002 – Sept. 2007	Executive Director Executive Director, Development Associate, Program Staff Executive Director	Baseline: $137,225 Year 1: $140,000 Year 2: $145,000 Year 3: $152,000 Year 4: $160,000 Year 5: $164,670

Objective #7: Improve Institutional Capacities **Objective #7.2:** Expand Curamericas child survival activities to program operations to two new countries (from four to six)more countries			
#7.2 Indicator: Percent increase of income received from grants at HQ *Measurement Method: Review of annual Curamericas records and program reports.*			
Major Activities	***Time Period***	**Personnel**	**Baseline/ Targets**
Restructure program staff in order to encourage the development of new programs and respective grant income. **Expand organization's visibility with foundations using Board of Director and major donor network.**	Jan. 2003 – April 2003 Oct. 2002 – Sept. 2007	Executive Director, Senior Program Specialist Executive Director, Development Associate	Baseline: 4 Year 3: 5 Year 5: 6

Objective #7: Improve Institutional Capacities
Objective #7.3: Assure standardization of the CBIO methodology across countries Curamericas will develop and standardize educational materials for field offices in CBIO methodology, nutrition and micronutrients, pneumonia case management, control of diarrheal diseases, maternal and neonatal health, family planning, and IMCI.

Indicator #7.3: Number of standardized educational materials developed by Curamericas for field offices in CBIO methodology, nutrition and micronutrients, pneumonia case management, control of diarrheal diseases, maternal and neonatal health, family planning, and IMCI developed by Curamericas.
Measurement Method: Presence of materials during mid-term and final evaluation

Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Hire an HQ Program Specialist with a background in health education	Feb. 2003	Executive Director	
Review current educational materials in use by Curamericas partners and other organizations	March 2003 – Sept. 2004	Program Specialist	Baseline: 0 Target: 7 materials
Develop and pilot test developed materials in Guatemala	June 2003 – Sept. 2004	Program Specialist Educ. Coord.	
Revise and print the materials	July 2003 – Oct. 2004	Program Specialist	

Sustainability

Objective #8: Child health activities are eventually sustainable locally **Objective #8.1**: Increase the % of the beneficiaries who live within 5 kilometers of a health post with at least one health worker trained in IMCI protocols			
Indicator#8.1: Percentage of beneficiaries who live within 5 kilometers of a health post with at least one health worker trained in IMCI protocols *Measurement Method: Community census and maps; records of health personnel*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Train health facility workers and HVs in IMCI Staff health clinics and posts in the rural communities	June 2003 – Jan. 2004 Oct. 2002 – Sept. 2007	HVs, CF, IFs, ANs, and ADs ADs, ANs, IFs, and CFs	<u>Baseline: to be collected by Year 1 annual report</u> Mid-term: To be determined Year 5: To be determined

Objective #8: Child health activities are eventually sustainable locally **Objective #8.2**: Curamericas – Guatemala will promote child survival activities to the municipal governments by attending at least 10 meetings annually of the Municipal Development Committee in the three municipalities			
Indicator #8.2: Number of Municipal Development meetings that a representative of Curamericas – Guatemala attended in the past 12 months *Measurement Method: Community census and maps; records of health personnel*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Negotiate with the municipal governments for additional child survival resources Promote child survival activities with local government leaders	Oct. 2002 – Sept. 2007 April 2002 – Sept. 2007	CSPC CSPC	<u>Baseline: 0</u> Mid-term: 10 annually Year 5: 10 annually

Objective #8: Child health activities are eventually sustainable locally **Objective #8. 3**: 70% of care groups will have at least 80% of all members attending at least 80% of all meetings in the last quarterEstablish sustainable Care Groups in all project communities			
Indicator 8. 3: Percentage of care groups will that haved at least 80% of all members attending at least 80% of all meetings in the last quarter *Measurement Method: Care Group records*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Identification and training of CFs and HVs Establishment of Care Groups Promotion of child health activities during the Care Groups by CFs, HVs, and other project staff	March 2003 – Sept. 2007 Oct. 2002 – Sept. 2007 Dec. 2002 – Sept. 2007	IFs, CFs, and HVs IFs, CFs, and Educ. Coord. IFs, CFs, HVs, and Educ. Coord.	<u>Baseline: to be collected by Year 1 annual report</u> Mid-term: 50% Year 5: 70%

Objective #8: Child health activities are eventually sustainable locally **Objective #8.4**: Increase local monitoring and evaluation capacity			
Indicator #8.4: Ninety percent of Institutional Facilitators will be able to do a Rotating Mini KPC survey properly, based on checklist scores. *Measurement Method: Checklist*			
Major Activities	**Time Period**	**Personnel**	**Baseline/Targets**
Train Personnel on use of Rotating Mini KPC	Oct. 2003 – Sept. 2007	IF	Baseline: 0 Mid-term: 50 % Year 5: 90 %

ANNEX A: RESPONSES TO THE PROPOSAL AND DIP REVIEWS

A1: RESPONSES TO THE PROPOSAL REVIEWS

1. Consider reviewing existing data on the quality of child care at health facilities, or the availability of essential vaccines, drugs, equipment and supplies, that will affect the quality of care:

In March, Curamericas led a health facility assessment (HFA) of the MOH health centers and posts in the three municipalities. The HFA assessed the skills of the health workers to assess, classify, treat, and treat sick child for common childhood illnesses. A description of the assessment and the results are included in section in the Summary of Baseline and Other Assessments. Essential supplies for the project are provided by the MOH based on the amount used in the previous month and the local population data. The supply logistics system and barriers to quality child care are explained in the summary of baseline data and in the intervention section (**Section E.2**).

Curamericas expects that there will be an increase in the demand for services and supplies during the life of the project. It order to minimize stock outs, Curamericas will make timely requests to the MOH depot in Huehuetenango using the standard MOH forms. Project staff will receive refresher training on how to manage the supplies and accurately complete the forms. Once supplies reach a minimal amount, based on local population and frequency of use, health workers complete the forms and send them to MOH department office in Huehuetenango. One problem in the past has been that the MOH does not have a way to transport the supplies. Curamericas will hire a truck to transport supplies from Huehuetenango to the health facilities on a monthly basis which we believe will improve the availability of supply and medicine stocks.

2. Consider reviewing existing data on the practices of traditional healers or drug vendors and the barriers to changing their behaviors:

Based on interviews with MOH personnel in Huehuetenango and project staff, there are a number of rural drug vendors and traditional healers in the project area. For many people in the area these serve as the first providers of health care for a sick family member.

Traditional Healer – In most rural villages there is at least one traditional healer who many of the families trust in providing initial health care. Many of these healers have had their skills passed down to them from their relatives and use a mix of local herbs to treat a variety of illnesses. They are perceived to have a high level of trust of the local people because they are from the area and have the same customs, speak the same language, and are usually the first provider of care that a family seeks. Curamericas will conduct further qualitative data of the local practices of the traditional healers, and use focus groups of caretakers in the area to better understand the use of traditional healers and understand barriers to health care. Once these barriers are understood, Curamericas Program Specialist and the C/G health workers will develop an action plan to improve the practices of the traditional healers.

Rural Drug Vendors – In the municipal centers there are pharmacies that are licensed to sell medicines under the direction and supervision of the MOH. These are supposedly routinely monitored and most follow MOH guidelines including prohibiting the disbursement of medicines

without a prescription from a local health care provider. In reality, many pharmacists have received minimum training and dispense medicines based on the symptoms of the patients. Clients use the pharmacies because of the perceived "high" quality of treatment; clients go seeking a "pill" and are provided one by the pharmacist therefore their concern (illness) was addressed. Health centers are often perceived as providing poor care because clients do not always receive medication for their illness.

Health staff are aware that antibiotics are routinely bought by people in the project area though the local pharmacies, which are regulated, or though unlicensed vendors on market days. A strong barrier to changing their behaviors, program staff believe, is that these sellers rely on selling the drugs for profit and livelihood, therefore their resistance to change is expected to be great. Craig Boynton, Curamericas Country Program Manager, has requested more information on the practices of unlicensed vendors from Edward Scholl at the USAID/Guatemala mission. Mary DeCoster and Mario Valdez will review materials on the subject, develop a qualitative study, and implement a strategy to train and educate local pharmacists and rural vendors.

3. Consider reviewing objectives and making them more health outcome specific:

The objectives of this program have been changed and reflect this programs orientation to strengthen quality of care of the health care services and improving the home-based prevention of illness, and recognition, treatment and care seeking for illness when it occurs. These new objectives reflect that the approach of the project is primarily based on providing maternal and child health services through a system of community outreach using health educators, Institutional Facilitators (IF's), Community Facilitators (CF's), Health VolunteersHealth Volunteers (HV's), and Care Groups. This structure is in accordance with the MOH plan of providing primary health care services to rural populations. The new objectives are stated above in *Changes in Program Description*.

4. It is not clear how community and facility-based health workers will be supervised:

See **Supervision section** (**pg. 59**) of the DIP for a detailed description of how community and facility-based.will be supervised

5. Clarify how community-level health workers and volunteers will be supported (salaries, supervision of practice, essential material, drugs, and supplies) and motivated to continue working in the long term:

Community Facilitators have received some financial support in the past from the MOH, but the number of CFs will be increased in this project. The MOH has had plans to expand coverage (e.g., through the government SIAS program) for some time. These plans, however, change as government administrations change and (frankly) it is uncertain as to whether there will be funds available for continuing the work with the CFs once this project has ended. The presence of CFs now, however, does create a demand for services, and other municipalities where there has been demand for services have been more likely to successfully petition the government for community-based workers (e.g., several of the municipalities closer to the Mexican border). Secondly, it is hoped that the Care Groups will eventually be able to supplant much of the need for CFs over the long run by taking on their health promotion role. Studies in Mozambique where Care Groups have been used found that, a full thirty months after the end of the Care Group project, Care Groups were still meeting: 93% of Care Group members were active 20

months after the project closed. Furthermore, the participants continued to exceed the final program goals on eight key indicators. Not only were there steep increases from baseline levels seven years earlier, but changes went well beyond individual behaviors to changes that necessarily involved community-bases services by volunteers (e.g., number of children being weighed and mothers receiving nutritional counseling) and sustained services by the MOH at the local level (e.g., malaria treatment, use of modern family planning methods, and completed immunizations). This is our hope for the Care Groups in our project areas, as well.

6. Consider developing a clear plan for how behavior change messages and materials will be developed – including how ethnographic data will be collected, if needed. Review available data on the practices of traditional healers as part of qualitative research:

See **the behavioral change section** in the DIP for a detailed description of how behavior change messages and materials will be developed. For information on traditional healers, see **Section E.2. Summary of Baseline and Other Assessments.**

7. Consider developing a strategy for training and then monitoring/supporting the practices of village-based shopkeepers over time. Clear practice standards could be based on these standards:

It is correct that this project does not directly focus on supporting the practices of village-based shopkeepers. Private pharmacies are regulated by the MOH, and the MOH periodically visits the pharmacies to ensure their compliance with governmental regulations regarding the selling of drugs. We are aware that most pharmacies do sell non-prescribed medications, and that many families will go directly to a pharmacy bypassing the health center completely. There also are unregulated vendors of drugs in the area, especially on market days, who sell a variety of medicines, including antibiotics. The MOH, when they are notified of these, will try to close the vendors. This happens most frequently in the urban areas, and in our rural areas the vendors are rarely regulated.

Craig Boynton, Curamericas Country Program Manager, has contacted the USAID mission in Guatemala for more information and conducted a search for more information on this specific to Guatemala. There appears to be little local information available. In the meantime, the project proposes to collect qualitative data on the practices of local vendors using qualitative data in the area and develop a plan to monitor the vendors.

8. Clarify methods and materials that will be used for IMCI training of both community and facility-based health staff:

IMCI training for community and facility-based health staff will be provided by the Guatemalan MOH. The MOH has developed training materials for IMCI with technical input from USAID, PAHO, BASICS, and other organizations using the WHO training protocols. The materials were developed in May 2001 and have been used by the MOH for training health workers in the community. In the Department of Huehuetenango, the training is facilitated by the MOH and held at the Hospital Nacional de Huehuetenango. This training is five days in duration and contains the following modules:

- Evaluation and classification of children from two months to five years of age;
- Treatment of sick children from two months to five years of age;
- Evaluation, classification, and treatment of children one week to two months of age;

- Counseling to the mother or caretaker; and,
- Consulting for reevaluation and follow-up.

Institutional Facilitators will receive training in both IMCI and Community IMCI since the Institutional Facilitators are responsible for supervising the community health workers and need to be familiar with their training. The technical content for both is the same but the community IMCI training has been simplified. All health workers will be supported using the standard WHO methodology for follow-up of IMCI training, and will use the WHO checklist for that purpose.

9. Consider reviewing current referral practices, including barriers to referral and include program strategies to address referral barriers:

The biggest identified barriers to referral in the project area include: large distances to the health centers from the most remote villages; inadequate counseling by the health staff; and, inadequate care seeking behavior. Curamericas will collect more data using qualitative methods such as Barrier Analysis. We will also use **Barrier Analysis**, a rapid qualitative tool, to determine barriers to behavior change through a quick assessment of current perceptions of mothers and other care providers. This methodology has been used successfully in Bolivia, Haiti, Kenya, and Mozambique by Food for the Hungry and Curamericas. Based on the Health Belief and other behavior-change models, Barrier Analysis is used to explore the barriers to taking preventive action.

Since all behaviors cannot be researched, this methodology will be used to explore barriers to those behaviors which the staff feel are most detrimental to health status. The results of Barrier Analysis are then used to further refine educational materials to confront barriers that care providers often face in taking preventive action and prompt care seeking.

10. Consider splitting the list of key household behaviors and care-seeking practices for maternal and newborn care into focused messages for the caretakers of young children and behaviors that target TBA and other health workers.

This was an oversight on part of the staff during the preparation of the project proposal and has been corrected in this DIP in the **Maternal and Neonatal Care section**. The list of household behaviors has been revised reflecting behaviors that will be promoted at the household level and those that will be promoted at the community level. For example, key messages that will be promoted with caregivers and women of reproductive age (WRA) are focused on actions and knowledge that they should have in order to improve their well-being. (These include, but are not limited to: receiving at two doses of TT prior to their pregnancy; knowledge regarding anemia and care-seeking when they have these signs; knowledge regarding importance of iron/folic acid supplements and where they can get these; and, benefits of immediate breastfeeding.)

11. Review inappropriate use of antibiotics for URTIs and watery diarrhea in baseline studies:

A health facility assessment was conducted by Curamericas as part of baseline studies. The assessment team did not identify any inappropriate use of antibiotics during this assessment. Only one health facility worker is trained in IMCI and we believe that it is more probable that the health workers do not correctly assess or treat ARI and diarrhea. Curamericas will train all

health facility workers and select community workers in IMCI and Community IMCI during this project. The workers will be monitored using a variety of quality assurance tools including spot checks of their records and direct observations (using verification checklists) to assess the quality of the work. Key messages on appropriate antibiotic use will be developed for caretakers. These messages will be promoted by the CFs and HVs during Care Groups and home visits.

12. Consider training Health VolunteersHealth Volunteers in counseling on the nutritional management of persistent diarrhea:

The KPC baseline found that over half (52%) of the children in the study had diarrhea during the previous two-week period, and only 18% of mothers used ORS and home-available fluids (HAFs). 71% of the children received *less* liquid during a recent diarrheal episode.

Health VolunteersHealth Volunteers will receive training nutritional management of persistent diarrhea during their training in IMCI. The Guatemalan MOH IMCI protocols have recommendations for feeding of children with persistent diarrhea (based on WHO guidelines) and the Health VolunteersHealth Volunteers counseling will be supervised by the CFs using direct observation verification checklists. The IMCI training is scheduled for January 2003.

13. Clarify community HIS methods and processes:

See **Section E.1. Program Monitoring and Evalution** of the DIP.

14. Consider reviewing key program indicators including the number of antenatal visits, defining "skilled" health personnel, pneumonia case management, fluid intake during diarrhea, and including more specific indicators for capacity-building and sustainability:

New and refined indicators are included in the project's **Section 4. Work Plan**.

The project will routinely track health worker performance through the use of verification checklists, which are an integral part of the project's quality assurance process. Education Coordinators, Institutional Facilitators and Community Facilitators will receive training in the verification checklists in July 2003. Indicators that measure health worker performance are included in the project *Work Plan*.

The project has also strengthened its' capacity-building and sustainability indicators to reflect the project activities and goals to build local capacity and sustainability. These indicators reflect the programs strategy to improve local capacity to manage child survival interventions through improved management of supplies, improved health worker abilities to assess, classify and treat sick children, increased participation by Curamericas – Guatemala in municipal development planning committees, and increased local financial support for the project.

Budget Information

Strengths	*Weaknesses*
• The budget is very detailed and comprehensive.	• The total cost per beneficiary is high. • There is no plan for the phase-out of recurring costs.

Executive Summary and Overall Application

Strengths	*Weaknesses*
• This is a good presentation of information that covers all major aspects of the RFA. • Tying in IMCI is good. • The project includes an integrated approach.	

Description of the PVO Applicant

Strengths	*Weaknesses*
• The PVO mission and this program are well matched. • The PVO has demonstrated past experience in other countries with FOCUS. • The narrative gives a good overall view of the applicant. • The PVO will work with both the MOH and a NGO.	• The PVO only partners with one NGO and could have a larger group of partners. • The layout of the application makes reading difficult.

Situational Analysis

Strengths	*Weaknesses*
• The section makes a good case for creating the project in this geographical area. • Ambulatory doctors are involved. • The narrative gives a good overview of the health workers and health facilities. • This section includes a discussion of behavioral characteristics. • The applicant is able to describe the various ethnic groups and shows a good understanding of the population. • The proposed program includes good coordination with Project HOPE.	• The applicant chooses to partner with a NGO that has limited experience in carrying out health activities. • Although the different levels of services are mentioned, the description does not address the quality of service at these different levels.

Program Approach

Strengths	*Weaknesses*
• The program confines its activities to a focus on three areas. • The program activities target those at greatest risk. • The PVO is a member of the CORE working group. • Introducing IMCI is a good idea. • The plans are clearly tailored to the local situation. • The discussion addresses all RFA requirements. • The applicant includes formative research as the basis of its behavior change strategy.	• All field people are from the NGO and will need close supervision throughout the program. • The plan is not clear on how the PVO is going to attempt to collaborate with other partners working in the area. • The terminology and cross-referencing in this section is confusing. It would be helpful to clearly link the general directives on page 7 with those more specifically described on pages 32 and 33. • There is too much reliance on a single local partner to accomplish goals.

Child Survival Interventions

Strengths	*Weaknesses*
• The program includes appropriate and creative interventions to deal with multi-ethnic, multi-language target groups. • The desired behaviors are clearly defined. • The section includes a comprehensive analysis of the target population. • Comprehensive information is provided for each intervention, particularly those related to care seeking practices and high school behaviors. • The proposed program is consistent with the MOH policies in all areas.	• The discussion on assuring quality of care needs more detail on how the applicant will assure quality in interventions and how quality of care issues will be dealt with in more depth. • The PVO will not be able to extend emergency obstetric care through this program.

Organizational Development

Strengths	*Weaknesses*
• The four-year strategic plan uses OCAT. • The participatory approach is a good concept. • The data collection methods balance perceptions with empirical observations. • The plans for interaction with the Mission through monthly partner meetings strengthens the program.	• The description is not clear about whether the applicant undertook organizational assessments with local partners other than the one mentioned. • Any political instability leaves the program quite vulnerable.

Sustainability

Strengths	*Weaknesses*
• The applicant is seeking MOH resources to aid in sustainability. • The applicant plans to institute a maintenance fee for services to help sustain the program. • The applicant is seeking national and international funding.	• The program is too dependent on the local partner for long-term sustainability. • Working with such a poor population leaves few opportunities for long-term funding. • The process for instituting the fee-for-service in Year 1 (described on page 29) does not appear in this discussion.

Performance Monitoring and Evaluation

Strengths	*Weaknesses*
• The information in this discussion is well laid out. • The plan includes baseline figures in the evaluation. • There are good indicators selected. • The use of many interventions is good. • Involvement in the Mission's working group will keep the applicant up to date.	• The application needs more detail on the existing Health Information System methods and processes, and how this program will interact with them.

Management Plan

Strengths	*Weaknesses*
• The plan is strengthened by the inclusion of monthly objectives, as well as of technical and financial reports. • The PVO has previous experience in Bolivia and Haiti. • The responsibilities and roles of the staff are clearly delineated. • The plan is well thought out with appropriate coverage.	• The PVO does not have a written security plan. • This is the PVO's first child survival endeavor. • The organizational chart for the local partner is blank.

Summary of Main Points

Strengths	*Weaknesses*
• The plan addresses all of the requirements in the RFA well.	• There is too much reliance on a single local partner.

Questions to Answer for DIP (Based on USAID Technical Review of the CS Proposal)

Overall Summary of Proposal Strengths and Weaknesses

Strengths

Planning: Selection of focus municipalities based on public health need. Clearly stated project goal that focuses on important causes of under-five morbidity and mortality in the focus area. Comprehensive review of existing data and discussions of the each technical area - including "key behaviors" that will be the focus of project activities.

Implementation/program approach: Program approaches tailored to the local health system; activities are implemented through FUMESDER, a local NGO that is funded by the Government SAIS program and will be responsible for health services at facility and community levels in the longer term. Program activities consistent with the policies and guidelines of the Ministry of Health - and use facility and community IMCI as a technical standard. A community-based approach is proposed, using community based volunteers (Health VolunteersHealth Volunteers) organized into Care groups and supervised by Community Facilitators. These lower level staff are supported by facility-based Institutional Facilitators and Ambulatory Doctors and Nurses. This system allows: door to door mapping of households in focus communities, regular health education, outreach services, and regular supervision of community-based activities. The behavior change strategy focuses on household visits by health volunteers and direct one-on-one education. A plan to collaborate and share technical resources and materials with local partners is described. An approach to ensuring financial sustainability in the longer term is described.

Weaknesses

Problem analysis: No data are presented on the quality of care provided by facilities or CHWs, or of the status of the "system" elements required to support child services. No data are presented on the practices of traditional healers or rural drug sellers.

Program approach: General objectives could be made more specific to health outcomes. Community-level activities will be relatively resource intensive, and it is not clear how all the resources (per diems, vehicles, essential drugs and supplies) will be provided in the long term. The methods for supervising facility and community-based health workers are not clear. Not clear how behavior change messages and materials will be developed. No activities proposed for improving and monitoring the practices of traditional healers or drug vendors who are important providers of care in these communities. Not clear what methods and materials will be used for IMCI training. No strategy for understanding or improving referral practices.

Child survival interventions: Baseline data on inappropriate use of antimicrobials for pneumonia and diarrhea would be useful since this may be a problem - strategies for reducing inappropriate use may be needed. Low level CHWs or volunteers could be given training in nutritional counseling for persistent diarrhea - since this is a problem.
Monitoring and evaluation: The community-based census/mapping system could be described in more detail. Some indicators need to be better defined. Measures of quality of care are needed.

STRENGTHS

This proposal has the following strengths:

- Selection of focus municipalities based on public health need – in particular high rates of malnutrition, high infant and child morbidity and mortality rates - and limited access to health services.

- Clearly stated project goal that focuses on important causes of under-five morbidity and mortality in the focus area. Comprehensive review of existing data and discussions of each technical area - including "key behaviors" that will be the focus of project activities.

- Program approaches tailored to the local health system; activities are implemented through FUMESDER, a local NGO that is funded by the Government SAIS program to implement services - and will be responsible for health services at facility and community levels in the longer term.

- Program activities consistent with the policies and guidelines of the ministry of health.

- A focus on an integrated approach to the child survival at both the health facility and community levels that uses IMCI as a guide.

- A community-based model using community based volunteers (Health VolunteersHealth Volunteers) organized into Care groups and supervised by Community Facilitators. These lower level staff are supported by facility-based Institutional Facilitators and Ambulatory Doctors and Nurses. This system allows: door to door mapping of households in focus communities, regular health education, outreach services, and regular supervision of community-based activities. Facility-based staff train and supervise community-based staff.

- A strategy to improve community outreach to deliver preventive and curative services - in order to address problems of access to facilities.

- A behavior change strategy that focuses on household visits by health volunteers and direct one-on-one education. Data are used to design and test health education messages.

- A plan to collaborate and share technical resources and materials with local partners most importantly FUMESDER, but also including: ASSDI (community-based work); CONFLA (national literacy committee); the municipal government and the Ministry of Public Health; and project HOPE (IMCI training).

- An articulated approach to ensuring financial sustainability in the longer term.

WEAKNESSES

Problem analysis/review of data

- No data are presented on the quality of child care at health facilities - including immunization practices; or the availability of essential vaccines, drugs, equipment and supplies - that will affect the quality of care. How are essential supplies currently budgeted and delivered? Are stock-outs a problem? Will the system be able to manage with the increased demand that will occur - since care-seeking and referral will increase, and outreach sessions will also increase in frequency. What are the important barriers to maintaining adequate supplies? What are the barriers to high quality child care? Are data available form focused program reviews, supervisory records, or other sources? What data will be collected by the health facility assessment?

- No data are presented on the practices of traditional healers or drug vendors. Are data available? They are important providers in these communities. Have programs in other parts of the country targeted these groups? What are the barriers to changing their practices? Will they follow recommended guidelines? Should more qualitative data be collected on these groups during the planning phase, in order to better design strategies for changing their practices?

Recommendations
Consider reviewing existing data in the above areas. If data are not available, consider collecting quantitative and qualitative data in these areas for program planning.

Program Approach

- Program general objectives. Objectives 2 and 3 seem to be very similar - could they be combined? The objectives do not focus on health outcomes - for example, improving the quality of care preventive and curative care provided to children and pregnant women - through household visits, outreach, and improve facility-based care. Or, improving the prevention of childhood illness in the home, as well as home recognition, treatment and careseeking for illness when it occurs.

Recommendation
Consider reviewing objectives and making them more health outcome specific.

- Not clear how community and facility-based health workers will be supervised. It is likely that current supervisory practices are outdated and not based on SCM guidelines. Will existing supervisors from the MOH be used to supervise facility-based staff? Have these supervisors been trained? Are MOH resources available to conduct regular supervision? Supervisors commonly lack vehicles, time and per diems - how will these barriers be overcome - if the project is going to support supervisory activities, how will this be sustained in the longer term? At both levels (facility and community), are standard checklists based on SCM guidelines in existence or will they be developed? Will supervision include observations of practice and problem solving? How will supervisory data be used for program planning? What indicators will be used to measure supervisory visits and their quality? Observations of practice are important.

Recommendation
Clarify the methods that will be used to supervise health workers at both facility and community levels.

- Resources for community-based activities. A large number of visits to communities are planned for outreach, training and supervision (requiring vehicles, fuel, per diems, paper and so on). In addition, community-based staff will require additional materials for community-based mapping, health education and case-management (log-books, pens and pencils, essential drugs (vitamin A, iron, ORS,). Are FUMESDER resources sufficient to sustain these activities in the longer term? Will the MOH provide some of these supplies/materials? Are the systems in place adequate to ensure that these supplies will be available? How will this be sustained? Local health staff often have limited time and resources - will they be able to perform supervision and oversight in the long term. As a related point, it is stated that some health workers will be paid with USAID funds - are these project funds, and if so what will happen to these staff salaries when project activities cease?

Recommendation
Clarify how community-level health workers and volunteers will be supported (salaries; supervision of practice; essential materials, drug, supplies) and motivated to continue working in the long term.

- Not clear how behavior change messages and materials will be developed. Will local ethnographic/qualitative data be used to develop messages and materials? Are enough ethnographic/qualitative data available now and, if not, how will these data will be collected. Culturally specific beliefs and terms for malaria, diarrhea and ARI are important -so data will be critical to developing effective behavior change materials and messages. In addition, are there data on the practices of traditional healers? - since these will targeted for some health education activities. In the project timeline there does not seem to be time for this process before educational message training is conducted. As a related point, does the IMCI nutrition food box (used for IMCI counseling at both the facility and community levels), need to be adapted locally - if so this will require a process of qualitative data collection and food trials. Will materials be pictoral? Will the same messages be used by all categories of health worker? What is the cost of producing these materials - will the MOH or FUMESDER be able to produce them themselves in the longer term?

Recommendation
Consider developing a clear plan for how behavior change messages and materials will be developed - including how ethnographic data will be collected, if needed. Review available data on the practices of traditional healers as a part of qualitative research.

The Child and Adolescent Health Division of WHO Geneva has guidelines on the focused ethnographic survey method. For more information see:

WHO Programme for the Control of Acute Respiratory Tract Infections. 1993. "Focused Ethnographic Study of Acute Respiratory Tract Infections." ARI/93.2. Geneva:WHO.
Medical Anthropology, Vol 15, 1994. This issue was devoted the use of the FES method for ARI and is a useful reference.

Herman, E. and Bentley M. 1993. Rapid Assessment Procedures: To improve the Household Management of Diarrhea. In *Methods of Social Research in Disease*. Boston: International Nutrition Foundation for Developing Countries
PRITECH project documents. The FES method for diarrhea was used extensively by the USAID funded PRITECH project and documents are available from the USAID resource database.

- Village-based retail shopkeepers and traditional healers do not seem to be a focus for project activities, although many caretakers go directly to these groups when their child is sick. Should more emphasis be placed on a) better understanding current practices of these two groups; and 2) developing strategies and materials based on these data to change practices. It has proved notoriously difficult to change the practices of private drug dispensers, even if they are trained and have correct knowledge of practices for the management of malaria, diarrhea and pneumonia. A "knowledge-practice gap" is often seen, and direct interviews are not useful for determining actual practice. In general they tend to over-prescribe antibiotics, not to counsel and not to refer cases when needed. What strategies will be used to maintain high-quality practices and to monitor these over time? Since shopkeepers have a profit motive for selling drugs, especially more expensive drugs, how will this be addressed? Similarly, traditional healers may be resistant to practicing according to outside standards.

Recommendation
Consider developing a strategy for training and then monitoring/supporting the practices of village-based shopkeepers over time. Clear practice standards could be based on these standards. Consideration could be given to using the "simulated client" method for monitoring practice. For more information see:

Madden J.M. et al. 1997. Undercover care-seekers: Simulated clients in the study of health provider behavior in developing countries. Soc. Sci. Med. 45(10):1465-82.
WHO/CHD. 1994. Improving practices of pharmacists and licensed drug sellers. WHO Update 18:1-4.
Murray et al. 1998. Rural Drug Vendors in Eritrea: A Study of Practices and Training Needs. The BASICS project for USAID, Arlington VA.

- Not clear how training in IMCI will be conducted and what materials will be used. Have the standard IMCI training materials been adapted for local use? IMCI training requires quite a lot of clinical practice in both the hospital and outpatient settings. IMCI trained facilitators are required. The standard course is 11 days in duration. How will this be modified? How will clinical practice be provided for training? Consideration could be given to linking with MOH IMCI training activities being conducted elsewhere in the region, if possible. Follow-up after training is important - and there is a standard method and checklist available from WHO - will this be used. The BASICS project developed the IMCI "complementary course" which uses adult learning methods for less literate health workers and this could be considered for some categories of facility-based workers. Will community-based agents be trained using a "community IMCI" protocol that has been field tested in Guatemala? As a related point, the training plan indicates that staff will be trained in both IMCI and pneumonia case-management - since pneumonia case-management is a component of IMCI training, does it need to be repeated? Also, it is stated in the training sections for pneumonia and diarrhea that some staff (IFs) will be trained in both facility and community IMCI - is this needed? The technical content of both is the same - community-based IMCI is simplified.

Recommendation
Clarify methods and materials that will be used for IMCI training of both community and facility-based health staff.

- Referral practices. Referral of severely ill children is a key element of the IMCI approach - and important for reducing infant and child mortality, since severely ill children are at a higher risk of death. Are data available on current referral practices and barriers to referral? Caretakers of young children often do not accept referral for a number of reasons including: lack of funds, lack of transportation, other responsibilities (child care, work), inadequate counseling by health staff and inadequate understanding of the severity of the illness, decision-making practices in the home. If data are not available, consideration could be given to collecting data using qualitative methods, and investigating barriers to referral. Program activities can address these barriers and improve referral practices. As a related point, IMCI referral facilities need to have staff and resources to provide high-quality referral care (staff at these facilities should have received IMCI training). If the quality of care at referral sites is poor, then caretakers will not be motivated to accept referral.

Recommendation
Consider reviewing current referral practices, including barriers to referral. Consider including program strategies to address referral barriers.

Child Survival Interventions

- Key household behaviors and care-seeking practices for maternal and newborn care. These are not all household behaviors - many are TBA and facility-based health worker practices or knowledge. Consider splitting this list into household behaviors - that will be used for developing focused health messages for the caretakers of young children - and other behaviors that are outcome targets for TBAs and other health workers.

- Inappropriate use of antimicrobials for upper respiratory tract infections and simple watery diarrhea. It is worth looking carefully at this issue when conducting baseline HH and facility studies, since it is a common problem - antibiotics tend to be given inappropriately by facility-based health workers, and by drug vendors. Training methods can reinforce correct practices - health education messages for caretakers can also do so.

Recommendation
Review inappropriate use of antimicrobials for URTIs and watery diarrhea in baseline studies.

- If persistent diarrhea is a problem in the project area (likely since there are very high rates of malnutrition and a high prevalence of diarrhea), then consideration could be given to training Health VolunteersHealth Volunteers (and CFs) in counseling for the management of persistent diarrhea. The protocol is included in the IMCI training modules. The primary management for persistent diarrhea is nutritional – usually with a reduced lactose diet and supplemental micro-nutrients. The WHO-IMCI guidelines include current recommendations for the feeding recommendations. For more information see:

Black, RE. Persistent diarrhea in children of developing countries. *Pediatric Infectious Diseases Journal* 1993;12:751-761.

International Working Group on Persistent Diarrhea. Evaluation of an algorithm for the treatment of persistent diarrhea: a multi-centre study. *Bulletin of the World Health Organization* 1996;74(5):478-489.

Recommendation
Consider training Health VolunteersHealth Volunteers in counseling on the nutritional management of persistent diarrhea.

Monitoring and evaluation

- Community-based health information system. More details could be presented on how decisions about data to be collected will be made (health staff vs. community data needs); the format and length of the data collection forms/registries; which community-based staff are responsible for collecting data; and the process by which data are used at each level. Concerns include: 1) data collection is time consuming - and detracts from other activities; 2) data are not used by community health staff or community members locally; 3) data are not used at higher levels.

Recommendation
Clarify community HIS methods and processes.

- It is recognized that more specific indicators/measures for the quality of child care provided by HWs would be useful (of the type collected by a HFA), for pneumonia, diarrhea and nutrition. Direct observations of practice are usually required to do this, as well as exit interviews with caretakers of young children when they leave facilities. Some information on how children are assessed, classified, treated and counseled is important for planning training and for monitoring performance over time. Health worker performance outcome measures are important measures of quality of care. Simple measures that can be collected by observations (HF survey, supervisory visits) can be used to monitor improvements in clinical practice. One or two of this type of outcome measure would be useful for tracking changes in clinical performance over time.

  Examples of practice indicators could include: proportion of sick children that are checked for danger signs, proportion of sick children that have their vaccination status checked, proportion of sick children that are weighed and plotted on a growth chart, proportion of sick children with ARI that have their respiratory rate checked, proportion of sick children with diarrhea who have skin turgor checked, proportion of children diagnosed with diarrhea by the health worker given ORS, proportion of children diagnosed with pneumonia by the health worker given an antibiotic, proportion of children diagnosed with simple diarrhea given an antibiotic or antimotility agent inappropriately, proportion of children diagnosed with an upper respiratory tract infection given antibiotics inappropriately, proportion of mothers of sick children given advice on giving more fluids food or breast milk at home.

  In addition, few "systems" indicators for facility performance could be included - as important elements for improved quality of care. These could cut across several intervention areas and be more integrated. For example: Proportion of facilities that have had a stock-out of essential medications/supplies (ORS, first and second line antibiotics) in the previous month, proportion of facilities that have received at least one supervisory visit using observation of HW practice in the last 6 months, proportion of facilities with all essential

equipment available (eg timing device, ORS corner, weighing scales etc.). All are important markers of quality of care.

The collection of these types of simple indicator is summarized in the BASICS Integrated Health Facility Assessment Manual. Examples of indicators and methods for ARI and diarrhea separately area summarized in WHO manuals: Health facility survey manual: Diarrhea case management. CDD/SER/90.1 (Rev.1 1994), and the same for ARI case management. In addition, WHO will release an IMCI health facility assessment manual in early 2002.

An up to date summary of current IMCI indicators is available from the Interagency working group on IMCI monitoring and evaluation based in the Child and Adolescent Health and Development unit of WHO Geneva. Contact Dr. Thierry Lambrechts (lambrechtst@who.ch).

Indicators

- Antenatal visits. Is one pre-natal visit to a trained health professional adequate? Should at least 2 visits be made?

- *% of children 0-23 months whose births were attended by skilled health personnel.* Skilled health personnel should be defined - for example, TBA trained in birth practices in the previous X years.
- Pneumonia case-management. The case-seeking indicator should define "qualified health worker" (usually defined as a health worker trained in SCM). WHO gives 2 indicators: 1) The proportion of children with ARI needing assessment for whom care was sought outside the home. ARI needing assessment are defined as cases with cough that have rapid or difficult breathing. 2) The proportion of children with ARI needing assessment for whom care was sought from appropriate providers who have been trained in SCM.

- The indicator for fluid intake during diarrhea usually requires that *more* fluids are consumed. The WHO definition is: The proportion of all cases of diarrhea in children < 5 who actually consumed more fluid (ORS, food-based drinks, other recommended fluids, water) during their diarrhea than they usually consume. A feeding indicator could be included. Feeding during and after each diarrhea episode is critical to avoiding secondary malnutrition. For example: The proportion of cases of diarrhea in children <5 who consumed the same or more food during or after the diarrhea than they normally consume.

- Capacity-building/sustainability indicators could be more specific and include service delivery measures. For example, the proportion of caretakers who live within 5 kilometers of a health post with at least 1 health worker trained in SCM, or the proportion of all CHWs in the project area who have received SCM training, or the proportion of first-level HFs in the project area that have at least 1 HW trained in SCM. A measure of the effectiveness of home visits could also be useful. For example, the proportion of caretakers of young children who have received a home visit from a CHW in the past month. A measure of outreach visits could be useful: proportion of villages that received an outreach visit in the previous month; proportion of planned outreach visits conduced. In addition, more specific measures of facility capacity could be useful here. For example, the proportion of facilities that have had a stock-out of essential medications/supplies (ORS, first and second line antibiotics) in the previous month; proportion of facilities that have received at least one supervisory visit using observation of HW practice in the last 6 months; proportion of

facilities with all essential equipment available (eg timing device, ORS corner, weighing scales etc.); proportion of the annual district health budget allocated to child health activities.

Recommendation
Consider reviewing indicators based on the above comments.

A2: RESPONSES TO THE DIP REVIEW:

1. Ensure that the project reports on Intermediate Results specifically develop for CSHGP, rather than the Intermediate Results referenced in the January 1999 document. See reference: http://www.usaid.gov/pop_health/home/Funding/cs_grants/objectives.html

The DIP has been revised to reference the current global Intermediate Results.

2. Several of the targets established for change by the end of the project reflect small overall percentage changes. Is it reasonable to establish more ambitious targets?

Targets have been reviewed, and where they were too small to be measured with statistical significance, more ambitious targets have been established. Project area rates will also be compared to national levels where comparable data is available (such as baseline level of 480 maternal deaths/100,000 in the project area versus 190 maternal deaths/100,000 at the national level).

3. There seems to be an incongruence between the between the stated definition of sustainability on p. 98 and specific objectives on p. 118 and 119.

Revised definition: Curamericas defines sustainability as the state in which the local project partners, including Care Group members, are able to maintain clearly defined, high quality health benefits indefinitely, based upon their own capacity to generate and manage the necessary resources and services, in conjunction with community leadership and participation.

4. No specific M&E capacity indicators were identified in the workplan.

The folowing M&E capacity indicator has been added (Objective 8.4) to the workplan: Ninety percent of Institutional Facilitators will be able to do a Rotating Mini KPC survey properly, based on checklist scores.

5. Capacity building objectives and strategies identified for Curamericas HQ are too general, not focused on this CS project.

While some of the objectives and strategies are general, Objective 7.3 (Standardization of CBIO methodology) contributes directly to our ability to do this project.

6. Will the CBIO model run parallel to, or complement the existing MOH Health Information System?

Some of the CBIO forms (vital events forms) provide more in depth data on maternal and child deaths, including care seeking behaviors, and causes of delays in seeking/receiving care.

7. Consider using child weight as a way to create a framework to tie program interventions together.

The AIN system uses child weight as a framework, and has elements that will be useful in this CS project. But use of an AIN-type system would create unnecessary redundancies in combination with our use of Care Groups, CBIO, and IMCI/AIEPI methods and strategies.

8. Clarify management plan for project.

Mary DeCoster will be Curamericas' backstop for the CS project in Guatemala. She is in constant communication with Dr. Mario Valdez, CS Program Coordinator in Guatemala**,** by telephone and email, and will make regular backstopping visits to the project site. Tom Davis, Senior Program Specialist, and Craig Boynton, Program Specialist, will provide additional technical support.

Other minor errors have also been corrected, including some revisions to the project activities timeline.

ANNEX B: KPC REPORT

Baseline report
Survey Knowledge, Practices and Coverage

For mothers of children from birth to 23 months of age from the municipalities of San Miguel Acatan, San Sebastián Coatan, and San Rafael La Independencia from the department of Huehuetenango, Guatemala

A project from FUMESDER- the Ministry of Public health With financing from USAID for Curamericas

March 15th, 2003

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Background

The project "*Census-Based Impact-Oriented Child Survival (CBIO) in* Huehuetenango, Guatemala has the global goal to improve the health and the status of nutrition of children under five years of age and to improve the reproductive health of women of childbearing age (15-49 years old) through improving access to medical care and to health education. The project is financed by USAID and implemented by CURAMERICAS, FUMESDER, and the Ministry of Public Health of Guatemala in three rural communities of the country: San Sebastian Coatan, San Miguel Acatan, and Rafael la Independencia.

Approximately 66.000 people live in those three municipalities among which 12.000 are children younger than 5 years of age and 14.272 are women of child bearing age. The area is mostly populated with indigenous people, mainly from the Akateko, Chuj and Qanjobal tribes.

The health indicators for children and women are critical in the region of Huehuetenango. The mortality rate in children from birth through age 5 is among the highest in the country and is recorded at 71. The child and the neonatal mortality rates are respectively 50 and 23. Data show that diarrhea and acute respiratory infections are the most common diseases in the area. The levels of chronic malnutrition in Guatemala are the highest in Latin America. In Guatemala, it is estimated that 50% of the children suffer from chronic malnutrition. In the Northwest region (where the project is located), the levels of malnutrition are even worse.

The rate of maternal death in the country is of 190, but it is estimated that the mortality rate in the area of the project during the year 2000 was 486 per 100.000 live births. Only 38% of the women receive prenatal care from a qualified professional. The region has the lowest coverage of tetanus toxoid: 53% of the women have never received the vaccine. In addition, only 10% of the births take place in a formal institution. The protective practices such as adequate spacing of births and low parity are not very common in these three regions...

In general, it is clear that the practices of seeking medical care and treatment are deficient. Out of the 17% of children in the region with coughing and difficulty breathing, only 26% of the mothers took them to get medical attention. During episodes of diarrhea, only 47% of the mothers used SRO to treat their children.

Capacity Building

An important focus of the CBIO project is capacity building with local organizations. Key tools such as participatory evaluation promote collaborative and efficient decision making. Because of this, the participation during the KPC of FUMESDER (most of its staff), the Ministry of Health (to the level of center and health post) and members of the communities (teachers, educators) was important.

The main challenge in involving local partners in the process of the baseline evaluation revolved around in the difficulty in exchanging ideas and documents given the distance and technical difficulties (there is no email in the project's headquarters). It would have been ideal but costly to develop jointly the preliminary version of the questionnaire.

Methodology

To obtain up to date information about the knowledge, the practices and the coverage that impact both child health and reproductive health in the specific communities of the three municipalities that are part of the CBIO project, a baseline study was planned for November 2002 about neonatal and maternal care, nutrition and micronutrients, pneumonia, birth control**,** immunization and the control of diarrheic illnesses.

The questionnaire

The questionnaire used in the Curamericas/Guatemala KPC survey drew heavily from the KPC 2000+ and RapidCATCH questionnaires developed by CSTS. The consultant, with the technical assistance of Curamericas' Senior Program Specialist (Tom Davis), designed a preliminary rough draft of the questionnaire in Spanish. Following that, the KPC Core team made modifications to adapt it to local terminology and concepts using information learned during the focus group process and interviews with key informants from each cultural group. During review of the questionnaire with interviewers, supervisors and the KPC Core Team, further changes were made in grammar and language. An Events Calendar (see Annex 12) was created for each indigenous group, which was used to assure that good dates (e.g., birthdates) were used during the interviews. An informal Cultural Lexicon was also used to help interviewers use standard, alternate wordings of phrases (in the questions) when the wording of the questionnaire was not understandable to some interviewees (e.g.., "*asientos*" was used if the mother did not understand "*diarrea*.") All of this took place with the participation of Curamericas, FUMESDER, the MOH, and community representatives (the interviewers)."

The questionnaire was translated into Acateca and Qanjobal. To ensure accurate translation, two different people did the translation (without communicating with each other) and those two results were compared to put together a final version. No translation in the Chuj language was done, because very few people understand and are able to write in Chuj. The surveyors of the KPC team who worked in Chuj communities thoroughly prepared together the verbal translation of the questions that they would use with the Chuj.

Thirteen interviewers pre-tested the questionnaires in order to obtain information on how the questionnaire would be received, and to practice interviewing skills. Final adjustments were made to the questionnaire following this process.

There were two questionnaires: one used for mothers of children 0-11 months and one used for mothers of children 12-23 months. Both versions had an introductory section which helped the surveyor choose which questionnaire to use in which household (based on the rules established during the KPC planning process) for parallel sampling. Questionnaires also included a consent form on the first page with identifying information which could be removed after the survey.

The 0-11m questionnaire had 84 individual questions and covered the following topics:

- identifying information (including mother's community and identifying information about the child, ten questions;
- water and sanitation (two questions);
- information about the interviewee and the household (8 questions);

- breastfeeding, nutrition and micronutrients (12 questions);
- growth monitoring (two questions);
- sick child care (two questions);
- diarrhea (five questions);
- ARI (11 questions)
- care for pregnant women (ten questions);
- birth and care for the newborn (three questions);
- postnatal care (five questions);
- birth spacing (eight questions);
- knowledge about HIV/AIDS (three questions); and
- previous health education (one question); and
- anthropometry (two data fields).

There were a total of 64 questions in the 12-23m questionnaire. The topics covered in that questionnaire included:

- identifying information (including mother's community and identifying information about the child, ten questions);
- water and sanitation (two questions);
- information about the interviewee and the household (eight questions);
- breastfeeding, nutrition and micronutrients (eight questions);
- growth monitoring (two questions);
- vaccination (two questions with multiple parts);
- sick child care (two questions);
- diarrhea (five questions);
- ARI (11 questions)
- birth spacing (eight questions);
- knowledge about HIV/AIDS (three questions);
- previous health education (one question); and
- anthropometry (two data fields).

See annex 1 for samples of the documents.

The indicators

The indicators to study through the execution of the baseline are stipulated in the original proposal *CBIO*, and are related with the health factors previously mentioned (see annex 2, indicators for baseline).

Design

The methodology of sample used for the baseline is *Lot Quality Assurance Sampling (LQAS)* (translated as "*muestreo de lote para aseguramiento de calidad*"), which is a type of a special stratified sample. The purpose of this type of sample is to be able to assess the coverage or the quality of health services in a particular area; in the *CBIO*, the area is a jurisdiction supervised by one person. It allows the project to identify the areas which have levels of coverage that go beyond expectations in comparison to those which don't reach the level of expectation. Using

LQAS, it is possible to detect the differences in knowledge, practices and coverage between the jurisdictions and it's possible to determine the programmed areas which deserve attention due to poor performance/outcomes.

For the baseline, the project area was divided in 15 jurisdictions: 6 from the municipality of San Miguel Acatan, 6 from tithe municipality of San Sebastian Coatan, and 3 from the municipality of San Rafael la Independencia. In all, the 15 jurisdictions represent 114 communities and a cumulative population of 50.196 people (missing is the information from jurisdiction 6 from Coatan).

The sample size was 19 from each age group (0-11 months, 12-23 months) in each jurisdiction to minimize the risk of error by classifying the coverage level of a jurisdiction (alpha or beta errors) at less than 10%. The sample was done in parallel to adequately measure the indicators such as those linked to sick children.

Sample selection

The sample selection followed the sequence described below:

Selection of communities within each area of supervision

a. Make a list of all the communities and of the whole population of each community for each area of supervision.
b. Add populations to obtain the cumulative population of each area of supervision
c. Calculate the interval of sample (cumulative population divided by 19)
d. Choose a number at random (using a table of numbers at random)
e. The community with the population corresponding to the aleatory number is the community where we are going to start
f. Using an aleatory number as interval to identify additional communities until you get to 19 interviews (for each age group)

Selection of households within each area of supervision

a. The team of FUMESDER/MOH had done a sketch of the communities
b. The FUMESDER team divided the communities in sectors of approximately 40 houses
c. The FUMESDER team selected an aleatory number using the table of numbers at random
d. Each interviewer went with a sketch marked with the houses that correspond to the aleatory number chosen for the first interview of "the set" ("a set" is what we call an interview for the age group of 0-11 months and one for the age group from 12 –23 months)
e. Always went first to the home looking for a household with a child between the ages of 0-11 months
f. If he was not there (and if he was 30 minutes away), the interviewers kept going to house with the closest main door
g. They followed this technique until they were able to get an interview in each age group
h. For homes in which children from both age groups lived, (0-11 months and 12-23 months), it was selected at random (head or tail) to see which one would get the interview

i. For homes in which more than one mother of children under 24 months of age lived, the mother who was to get interviewed was selected at random (head or tail)

Training of the Baseline team

The KPC training (not including the practicum) took place from December 12-15 at the Curamericas office (adjacent to a MOH health center) in San Miguel Acatan. The consultant had been previously trained in the KPC 2000+ Training of Survey Trainers for PVOs (sponsored by Curamericas in June 2002). The curriculum used was based on the *KPC 2000+ Training of Survey Trainer* which draws heavily from CSTS' *KPC Field Guide*.

The training was provided to the baseline team (coordination personnel, supervisors, interviewers, data entry) (see Annex 8, List of the participants which were selected beforehand by FUMESDER according to the following basic criteria:

Supervisors

- Be able to read and write
- Having worked in the health field or community related activities
- Speak Spanish
- Speak the Mayan language (for certain areas of supervision)
- Have supervising experience and be able to supervise the interviewers and keep the integrity of the collected data
- Be responsible
- In good health
- Be able to review the quality of the completed questionnaires
- Examples of good supervisors: employees of FUMESDER and/or associate organizations, nurses, university or technical students, hospital or clinic personnel, personnel from the Ministry of Health

Interviewers

- Be female
- Be able to read and write well
- Have experience in the health field or having worked in rural areas
- Being a great communicator
- Work well as a team
- Speak the local language (for two of the municipalities)
- Be available during the entire training period and data gathering
- Good organizational skills (be able to organize the questionnaires and document the answers with accuracy)
- Responsible
- Knowledge of the geographical area
- Be in good health
- Can recruit local associates

Personnel for data entry

- Computer literate

The training was carried out through executing modules, mostly based on a Spanish translation of the curriculum of the *KPC 2000 Training of Survey Trainers*, in reference to the *KPC Field Guide*. The modules were specifically designed for each group of the team FUMESDER/Ministry of Health. See Annex 4 for the training agenda.

Overall, the training was very exciting. The project personnel as much as those being contracted gave it their all, there was full participation and people were very cooperative.
.
They realized that the design of a few of the modules from the TOST KPC was not appropriate for people who did not have a secondary level education (particularly in the area of the sample). It was necessary to make adaptations to the curriculum to ensure full understanding and train less people in these areas. Most of the sessions about the samples took place only with the coordination and logistics personnel. The preparation of the training modules took more time than that was planned given the fact that they had to be translated in Spanish.

Electricity shortages made it impossible to work with computers or photocopiers after 18:30 hours.

Data Collection (The Interviews)

The goal was to get interviews from 570 households.

On average, each interview lasted between 20 and 40 minutes, mostly depending upon whether or not there was a sick child in the house. The interviews with mothers of children from 0-11 months of age are longer (larger number of indicators) and take more time to complete.

The completing the baseline took 3 whole days, (See annex 11, Bitácora).

Challenges

Several challenges faced during the KPC were:

- **Distances between the base and some project communities are long, and travel between communities was difficult**, given the mountainous terrain. Only two motorcycles and two cars (a van and a small bus) were used to transport the interviewers and the supervisors. This led to some delays in picking up some of the interviewers and supervisors during the first day, but was then corrected.
- Project staff had worked with local leaders to prepare maps prior to the KPC, but **maps were not available for some communities**.
- **Communication with community leaders prior to the KPC could have been better**. Not all leaders knew about the KPC.
- **Working across several language groups was a challenge.** It was impossible to use a written questionnaire in Chuj (for reasons cited above), which probably meant that some questions may not have been asked the same way in all interviews (despite our efforts to minimize that occurrence). It was also difficult for Supervisors to monitor the quality of some of the interviews since, in general, supervisor speak the local languages (Chuj and Acateca) with less fluency.
- Another challenge (although minimal) was that **some of the scales used to weigh children were in kilos and were others in pounds**. Scales were divided so that the interviewers from the same jurisdiction used scales with the same weight unit. All weights were later converted to kilos.

Not all of the sketches from the communities were available because they have not been able to start fully the activities in all the communities from the project (mainly there was missing information about the communities where they start working since the first year of the project There are also influencing factors such as personal security and respect for the people in the communities; it's better to establish a dialogue with the communities before arriving with the interviews.

Work in programs where lots of ethnic groups and languages are represented is a challenge. It is difficult to monitor the quality of the translation and of the interviews because, in general, the supervisor speaks the language with less fluency. There is a need to evaluate the level of bias created by using lots of interviewers in the Chuj, Akateko and Qanjobal languages. The translation in the Chuj language was not done because very few people can write in this language (although it would be possible to contract a person during the time of the baseline, it is difficult for the interviewers to read it). On the first day of the baseline, all took written interviews in Spanish (but they did the interviews in the language) because the translator had a familial engagement.

Procedures to for Monitoring Quality Control

Quality of the KPC process was assured through high-quality training (including lots of practice sessions), proper selection of interviewers and supervisors, and the use of a KPC QI checklist (see Annex 6).

. The selection process of the baseline team was led by Dr. Mario Valdez, with excellent results. The team as a whole was dedicated, professional and cooperative. A lot of emphasis was placed on the correct way to select interviewees. The use of an all-female team of interviewers and supervisors should have helped to eliminate some of the reluctance that area women have in talking to strangers – especially male strangers – about some health matters. Mothers felt more at ease in expressing themselves more honestly and fully

The supervisors accompanied each interviewer to observe the quality of the interview and to offer advice to improve the interview process. They filled out a form See Annex 6) to obtain criteria for evaluation plus a base to give feedback

To improve the ability to get true data about the ages of the children, they developed and used calendars of events for each ethnic group (See annex 10, Calendar of Evenos) to help the mothers calculate correctly their children's birthdates.

Data Analysis

Data was tabulated manually using LQAS tabulation forms. Paper LQAS tabulation forms were then entered into an Excel spreadsheet that summed the results of the Supervision Areas to give point estimates of coverage, and also allows the user to identify Supervision Areas that are below average coverage (by applying decision rules). In general, indicator levels were low. Where they were very high (relative to the final target), we evaluated whether the final (target) indicator level had been achieved in each supervision area. (See findings by Supervision Area.) After entering all of the data onto the LQAS tabulation forms, 10% of the questionnaires were chosen at random to ensure quality of data entry. If errors were found for a particular tabulator during this check, all the tabulator's questionnaires were checked for accuracy.

Manual tabulation was used to calculate information about coverage regarding the indicators. 3 people were in charge of data entry, each one using an Excel *spreadsheet* l see Annex 7, Global Tabulation Table LQAS).

Te goal is to use the *KPC2000+ Epi Info Template* developed by Julie Mobley, but until now it has not yet been finalized.

For each indicator, the number of correct answers in each area of supervision was calculated. Afterwards, the sample size was calculated. The data obtained by dividing the correct answers by the size of the sample gives us the average coverage for each indicator. Using the LQAS table, *decision rule can be determined* to judge if an area of supervision reaches the average coverage or if it's below average coverage.

To control the quality of data entry, they worked in a team to ensure accurate data entry of the information.

There was a cleaning process of the questionnaires prior to data entry ensuring that each questionnaire was completely filled out and that it was understandable. This facilitated data entry, promoting fewer errors.

After entering all of the data, 10% of the questionnaires were chosen at random to check the quality of data entry.

Results

The use of the QAS methodology gives us useful information about the coverage. It indicates if an area of supervision is above or below the average for all of them. This way, it gives an indication about the geographical areas and the topics where a program should focus on childhood living conditions

Below there is a table which details the areas of supervision by indicator with results below the average.

Indicator	Area of Supervision
Percentage of mothers (with children 0-11 months)who had at least one prenatal checkup during her last pregnancy	San Miguel 5 San Rafael 1 San Rafael 2
Percentage of mothers of children 0-5 months who were only breastfed during the last 24 hours	San Miguel 5 San Rafael 1
Percentage of mothers of children 0-11 months who know at list two danger signs (the child needs treatment) linked to illness	San Miguel 5
Percentage of mothers (of children 0-11 months) not pregnant who do not want children for the next two years (or who are not sure whether they do or not) who used a modern birth control method	San Miguel 1
Percentage of mothers (of children 12-23 months) not pregnant who do not want children for the next two years (or who are not sure whether they do or not)	San Miguel 4 Coatan 2

who used a modern birth control method	
Percentage of mothers who know at least one place to get birth control	San Miguel 5 San Miguel 6
Percentage of mothers who have received at least 2 TT vaccinations before the birth of their last child	San Miguel 5 San Rafael 2
Percentage of children 12-23 months who received the BCG, DPT3, OPV3 and SPR/SR before reaching 1 yr of age	San Miguel 1 San Miguel 5 San Miguel 6

For further details on difference by supervision areas see the table on page 22 below.

Analysis of the KPC data by Curamericas' Senior Program Specialist follows.

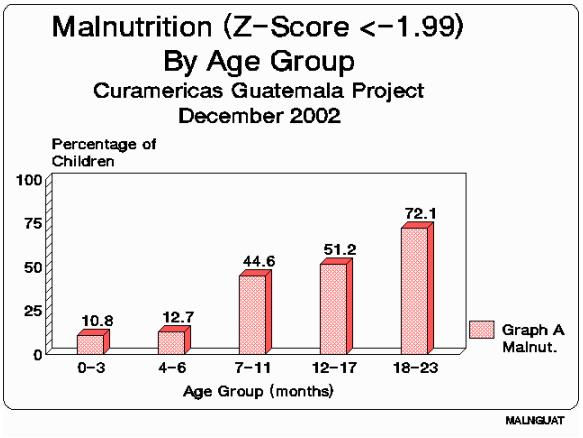
Nutrition:

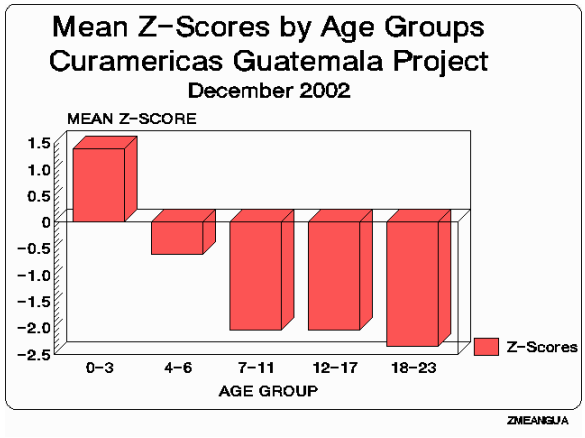
Indicator or Other Data	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL	UCL
% of children 0-23m who are moderately or severely underweight (WAZ<-2) [RapidCATCH indicator]	209	486	43%	38.6%	47.5%
% of children 0-23m who are severely underweight (WAZ<-3)	79	486	16%	13.1%	19.9%
% of children 0-23m who have a WAZ<-4			4.2%		
% of children 0-23m who have a WAZ>2 (obese)			4.6%		
% of children 12-23m who are moderately or severely underweight (WAZ<-2)	150	242	62%	55.5%	68.1%
% of children 12-23m who are severely underweight (WAZ<-3)	46	242	19%	14.4%	24.6%
% of children 12-23m who have a WAZ<-4			4.2%		
% of children 12-23m who have a WAZ>2 (obese)			0%		
% of infants with edema	2	231	0.9%	0.0%	2.1%
% of children 12-23m with edema	5	180	2.8%	0.4%	5.2%
% of children 0-5m who were exclusively breastfed during the last 24 hours [RapidCATCH indicator]	93	148	63%	55.1%	70.6%
% of mothers of infants who received Vitamin A during the two months following their last pregnancy (card verified)	0	255	0%	0.0%	0.0%
% of infants who were breastfed during the first hour of life	53	256	21%	15.7%	25.9%
% of children 20-23m who are still being breastfed	39	55	71%	58.9%	82.9%
% of children age 6–9 months who received breastmilk and complementary foods during the last 24 hours [RapidCATCH indicator]	53	119	45%	35.6%	53.5%
% of children 12-23m who no longer breastfed	38	203	19%	13.4%	24.1%
% of infants who ate a protein food in the last 24 hours	69	250	28%	22.1%	33.1%
% of children 12-23m who ate a protein food in the last 24 hours	133	203	66%	59.0%	72.1%
% of infants who consumed GLVs in the last 24 hours	40	250	16%	11.5%	20.5%
% of children 12-23m who consumed GLVs in the past 24 hours	87	203	43%	36.0%	49.7%
% of infants who consumed Vitamin A foods during the last 24 hours	15	250	6%	3.1%	8.9%
% of children 12-23m who consumed vitamin A foods during the last 24 hours	47	202	23%	17.4%	29.1%
% of infants who consumed iodized salt in the last 24 hours	35	232	15%	10.5%	19.7%
% of children 12-23m who consumed iodized salt in the last 24 hours	86	179	48%	40.7%	55.4%
% of children 12-23m who received vitamin A during the last six months (mother's report)	74	203	36%	29.8%	43.1%
% of children 12-23m who received vitamin A during the last six months (card verified)	57	201	28%	22.1%	34.6%
% of mothers of infants who received vitamin A during the two months following her last delivery (card verified)	0	255	0%	0.0%	0.0%
% of mothers who encourage/give incentives to their infant to eat when s/he does not want to eat	51	250	20%	15.4%	25.4%
% of mothers who encourage/give incentives to their child 12-23m to eat when s/he does not want to eat	75	200	38%	30.8%	44.2%
% of infants currently bottle fed	112	256	44%	37.7%	49.8%
% of children 12-23m currently bottle fed	116	203	57%	50.3%	64.0%
% of infants weighed in the last four months	57	257	22%	17.1%	27.3%
% of children 12-23m weighed in the last four months	42	203	21%	15.1%	26.3%
% of infants with a weight/height card	41	245	17%	12.1%	21.4%
% of children 12-23m with a weight/height card	39	203	19%	13.8%	24.6%

Discussion (Nutrition):
The anthropometry results for this area are alarming. In the project proposal, it was mentioned that the northwest region of Guatemala has the highest indices of malnutrition in the country: 33% are moderately or severely underweight for age, and 69% are reported moderately or severely stunted. Through the anthropometry part of this KPC study, it was found that **43% of children 0-23m are underweight (moderately or severely), and 16% are *severely* underweight. As children leave infancy, their nutritional status worsens: 62% are moderately or severely underweight, and 19% are severely underweight.** (As a point of comparison, 16% of preschool children in *Ethiopia* were severely underweight during the 1990-1997 period [UNICEF, SOWC]. 4.2% of children 0-23m had a weight-for-age Z-score below -4.0. All children with a WAZ<-4 were in the 12-23m old age group.

There were small differences by gender (males fairing worse), but differences were not significant. 90% of children 0-23m of age and 98.8% of children 12-23m were below the third percentile, and standard prevalence was 47% among children 0-23m of age and 75% among children 12-23m of age. The median weight-for-age Z-score was -1.77 among children 0-23m of age, and -2.27 among children 12-23m of age. The mean weight-for-age Z-score was -1.53 (CI: -1.38 to -1.69) for children 0-23m of age, and -2.28 (CI: -2.16 to -2.41) among children 12-23m of age. A small amount of obesity was noted (4.6% of children 0-23m of age), all of it in infants.

Analysis of nutritional status by age group shows that the proportion of children malnourished worsens sharply after six months and again after 17 months. The worse drop in mean Z-score is after six months, as well.





The quality of the anthropometry study and data appears good. Training was adequate, involved a practicum, and only 3% of records were excluded for flags. While there was some evidence of rounding of weights, it was not to the level that it would greatly affect analysis.

Some of the worst nutritional practices and situations identified by this KPC survey are:
- **44% of infants and 57% of children 12-23m are bottle fed;**
- **Lack of immediate breastfeeding (only 21% breastfeed in the first hour after birth);**
- **No mothers received vitamin A during the postpartum period, and only 28% of children 12-23m had received a dose of vitamin A (based on card; 36% based on mother's report) ;**

- **Only 38% of children 12-23m were encouraged to eat when they were not hungry (which is particularly problematic given the high number of malnourished children who may be anorexic, as well);**
- **Only 22% of children 0-23m had been weighed in the past four months.**

Other nutritional practices and situations of concern include:
- 63% of children 0-5m are exclusively breastfed;
- 45% of children 6-9m receive complimentary feedings;
- Consumption of protein-rich foods (66%), green leafy vegetables (43%), and fruits (23%) among children 12-23m of age are not particularly high.

Persistent breastfeeding of children 20-23m of age was good (71%), but could be improved during this project. The level of exclusive breastfeeding found in the KPC far exceeded the 28% that was expected at baseline (and mentioned in the proposal). **For that reason, the final indicator level (target) for exclusive breastfeeding should be increased to 75%.**

Recommendations (Nutrition):
- Further study **food security** in the project area, possibly by including questions on food security (currently under development by CORE) in the annual mini-KPCs. Determine to what degree food insecurity underlies the very high levels of malnutrition. If food insecurity is found, contact other organizations that might be interested in conducting interventions geared towards improving food security in the project area (e.g., increasing agricultural productivity and accessibility).
- **The KPC data set should be computerized, and associations should be sought** based on mother's age (e.g., younger vs. older mothers), nutritional status (two by two tables examining specific nutritional practices and their correlation with nutritional status), cultural group, educational level, number of preschool children in the household, etc.
- Time should be dedicated to **convincing community outreach staff and community leaders/members of the importance of high coverage with vitamin A supplements** as a way to decrease child deaths in the project area. Given the high-levels of moderate and severe malnutrition, this is extremely important.
- Give **high-quality growth monitoring** adequate attention since very little is being done presently.
- Given the very poor nutritional status and its effect on child mortality, **more overall level-of-effort should be given to improving nutrition in this project.**
- **An anti-bottle feeding campaign** should be waged, and **barriers to exclusive breastfeeding should be sought**.
- Assure that clinic staff are adequately trained in the **management of children with severe malnutrition** (including the WHO 10 Steps for the care of severely malnourished children[26], and guidance on delaying iron supplementation) and how to educate parents on **preparation of Hearth-type meals**. Consider home-based therapeutic care.
- A **positive deviance study and TIPs** are already planned for this project, and should help to determine practical ways in which to improve child nutrition. Particular attention should be given to **improving immediate breastfeeding** (e.g., working with TBAs), **encouraging children to eat** despite their level of appetite, initiating **complementary feeding** at six months, increasing usage of **iodized salt**, and **improving the diversity of the diet** (especially in regards to micronutrient-rich foods).

[26] See http://web.uct.ac.za/depts/chu/mch10j.rtf for the 10 steps.

- A full Hearth nutritional rehabilitation program was not included in this project because project staff felt that foods would not be provided by the communities, and no alternate source for foods have been found. The project staff should, however, **use the Care Groups to teach PD practices and to teach mothers how to make Hearth meals** (e.g., using the Nutrient Blocks exercise discussed during the recent CORE Hearth TAG).

Maternal and Newborn Care:

Indicator or Other Data	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL[27]	UCL
% of mothers of infants who had at least <u>two</u> prenatal checks (by any health worker, card verified) during their last pregnancy	62	251	25%[28]	19.4%	30.0%
% of mothers of infants who had at least two prenatal controls by a qualified person [MD, nurse, trained midwife] during the last pregnancy (mother's report)	50	254	20%	14.8%	24.6%
% of mothers of infants who had at least one prenatal control (mother's report, any source)	207	253	82%	77.1%	86.6%
% of infants whose births were attended by skilled health personnel[29] (nurse, auxiliary nurse, or MD)	22	257	9%	5.1%	12.0%
% of children 0-23m whose births were attended by skilled health personnel[30] (nurse, auxiliary nurse, or MD)	-	-	-		
% of mothers of infants who had a prenatal card for their last pregnancy	67	253	26%	21.0%	31.9%
% of mothers of infants who received/bought iron tablets/syrup during their last pregnancy.	84	256	33%	27.1%	38.6%
% of mothers of infants who ate the same amount or more food than usual during their last pregnancy	124	257	48%	42.1%	54.4%
% of mothers of infants whose last delivery was in a health facility	19	257	7%	4.2%	10.6%
% of mothers of infants who identified two or more signs of danger for newborns	14	257	5%	2.7%	8.2%
% of mothers of infants who had a postnatal check-up following their last pregnancy	58	255	23%	17.6%	27.9%
% of mothers of infants who were able to identify two of danger signs (to the mother) during the postnatal period	4	256	2%	0.0%	3.1%

Discussion and Recommendations (Maternal and Newborn Care):

Only 9% of the births of mothers of infants were attended by skilled health personnel, far below the 51% expected level mentioned in the proposal. **Given this, the final indicator level for this should also be decreased from 85% to 30%.** According to the proposal, TBAs will be trained

[27] LCL = Lower confidence level; UCL = Upper confidence level.

[28] Given the rather wide 95% confidence intervals for this type of survey, reporting proportions to one decimal point seems misleading (in terms of accuracy). For that reason, we have chosen to present most of the proportions rounded to the nearest integer. Also, given the large number of percentages used in this report and the occasional use of decimals, we have broken with convention: Percentages that begin a sentence are written as numbers rather than as words (e.g., "43%" rather than "Forty-three percent").

[29] There may have been some confusion on the part of mothers as to whether a "*comadrona*" (midwife) was qualified or not. The actual percentage may be somewhat higher or lower (but probably lower).

[30] This RapidCATCH indicator was not assessed. The project staff felt that it was unnecessary to measure this indicator since they would have good data on the 0-11m old group, and the recall bias for the 12-23m old group was higher, and hence less reliable.

during this project. **Qualitative research should be done to explore the current practices of TBAs to improve their training**.

One of the original project objectives, proportion of mothers of infants who had at least one prenatal control was not evaluated due to an error in the Lot Quality Assurance Sampling (LQAS) scoring matrix. Rather than evaluating for one visit, the matrix said, "more than one." (The original project objective [a RapidCATCH objective] will be evaluated once the data is entered in Epi-Info some time in the next quarter.) For the proportion of mothers of children 0-11m who had at least *two* prenatal controls during their last pregnancy, the average was 25%, and ten of the supervision areas had already reached or exceeded the final objective level set for the more stringent "one or more prenatal visits" objective that was mentioned in the proposal for one visit. Accordingly, **we have increased the final level for this indicator to 50%.**

26% of mothers of children 0-11m had a prenatal card corresponding to their last pregnancy. Analysis of the LQAS data for this indicator identified four supervision areas that were significantly below average (SM1, SM5, SR1, and SR3). 33% of mothers of infants took iron supplements during their last pregnancy. Three supervision areas (SM5, SR2, & SR3) had particularly low proportions of mothers who took iron. Only 23% of mothers of infants had a postnatal check-up, and this was particularly low in the SM5 supervision area.

Over half (52%) of mothers of infants said that they had eaten *less* than usual during their last pregnancy. Knowledge of danger signs during the postpartum period – both for the mother and child – was particularly low. **Education should particularly stress these aspects of maternal and newborn care.** Given the low proportion of institutional births and the very low knowledge levels of danger signs, the **training of TBAs should focus on proper referral, preparation of birth plans, education on danger signs, and the importance of prenatal and postpartum visits**. Danger signs should be taught during Care Group meetings, as well (and subsequently taught to all women in the project area).

Child Spacing:

Indicator or Other Data	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL	UCL
% of non-pregnant mothers of infants who do not want another child (or do not know) who are using a modern method of child spacing	48	252	19%	14.2%	23.9%
% of non-pregnant mothers of children 12-23m who do not want another child (or do not know) who are using a modern method of child spacing	40	159	25%	18.4%	31.9%
% of non-pregnant mothers of children 0-23m who do not want another child (or do not know) who are using a modern method of child spacing	88	411	21%	17.4%	25.4%
% of mothers of infants who know at least one place where they can get a method for spacing their births	104	252	41%	35.2%	47.3%
% of infants who were born at least 24 months after the previous surviving child	83	163	51%	43.2%	58.6%
% of children age 12–23m who were born at least 24 months after the previous surviving child	51	97	53%	42.6%	62.5%
% of children age 0–23m who were born at least 24 months after the previous surviving child [RapidCATCH]	134	260	52%	45.5%	57.6%

Indicator or Other Data	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL	UCL
% of mothers of infants who are pregnant	3	237	1%	0.0%	2.7%
% of mothers of children 12-23m who are pregnant	28	201	14%	9.1%	18.7%

Discussion and Recommendations (Child Spacing):

The current level of use of family planning methods is much higher than originally anticipated in the project proposal (21% vs. 6%). However, there are still many mothers (59%) who do not know where they can get materials and information on methods for child spacing. Also, a significant portion (52%) of children 0-23m of age are born within two years of their older sibling. It is recommended that the project staff:

- Include adequate messages on the **location and price of family planning methods** in the Care Group educational materials, and other material used for education of women and men in the project area.
- Given the high number of interventions, and very high levels of child malnutrition in the project area – and most likely concomitant levels of mortality – consider **decreasing the overall level of effort given to child spacing activities in order to make room for more level of effort dedicated to malnutrition.**
- Given the higher than expected baseline level, increase the final level (target) for mothers who know where to find a child spacing method to 90%.
- For the same reason, **increase the final target for the use of family planning methods indicator from 15% to 30%.)**

IMCI:

INDICATOR OR OTHER DATA	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL	UCL
% of mothers of infants who know at least two dangers signs related to childhood illness	53	256	21%	15.7%	25.7%
% of mothers of children age 0–23 months who know at least two signs of childhood illness that indicate the need for treatment [RapidCATCH Indicator]	112	459	24%	20.5%	28.3%
% of sick children age 0–23 months who received increased fluids and continued feeding during an illness in the past two weeks [RapidCATCH indicator] – *Not assessed during analysis by consultant*	-	-	-		
% of infants who were sick with diarrhea, dysentery, cough, or difficult or rapid breathing at the time of the survey[31]	82	257	32%	26.2%	37.6%
% of children 12-23m who were sick with diarrhea, dysentery, cough, or difficult or rapid breathing at the time of the survey	81	203	40%	33.2%	46.6%
% of mothers of infants who had received health education talks in the last three months	25	256	10%	6.1%	13.4%
% of mothers of children 12-23m who had received health education talks in the last three months	17	201	8%	4.6%	12.3%

Discussion and Recommendations (IMCI):

Very little health promotion is currently occurring in the project area – only 9% of mothers had participated in a health talk in the past three months, and only 21% of mothers could name two or more danger signs during illness. **Knowledge of two danger signs was better than the level expected (10%), so the final target for this indicator should be increased slightly from 75% to 80%.** This proportion should increase dramatically with the use of Care Groups (as planned in the proposal). When Care Groups first begin meeting, **recognition of danger signs related to childhood illness and proper care seeking behavior should be emphasized in the educational sessions**. Most of the health workers evaluated in the Health Facility Assessment (HFA) did not evaluate for IMCI danger signs (since all but one had not been trained in IMCI), but the HFA team gave highest priority to improving this practice and educating parent on the danger signs. One barrier to that was language. In order to reduce this barrier, the **project staff should begin development of the Chuj and Akateko medical phrase books early on, preferably within the next six months.**

[31] We realize that these can vary significantly according to the season and that this survey does not measure a stable prevalence of these illnesses. We report these levels here just to give the reader an idea of the levels of illness *at the time of the survey*.

Pneumonia:

INDICATOR OR OTHER DATA	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL	UCL
% of mothers of infants who sought advice/treatment in a medical facility or gave an antibiotic when their child had cough with rapid/difficult breathing	7	49	14%	4.5%	24.1%
% of mothers of children 12-23m who sought advice/treatment in a medical facility or gave an antibiotic when their child had cough with rapid/difficult breathing	13	38	34%	19.1%	49.3%
% of mothers of children 0-23m who sought advice/treatment in a medical facility or gave an antibiotic when their child had cough with rapid/difficult breathing	25	86	29%	19.5%	38.7%
% of infants who had an illness with cough in the last two weeks	66	77	86%	77.9%	93.5%
% of children 12-23m who had an illness with cough in the last two weeks	55	74	74%	64.4%	84.3%
% of children 0-23m who had an illness with cough in the last two weeks	121	151	80%	73.8%	86.5%
% of infants with cough and rapid/difficult breathing	51	77	66%	55.7%	76.8%
% of children 12-23m with cough and rapid/difficult breathing	41	74	55%	44.1%	66.7%
% of children 12-23m with cough and rapid/difficult breathing who received the same amount or more liquids during the illness	14	45	31%	17.6%	44.6%
% of children 12-23m with cough and rapid/difficult breathing who received the same amount or more foods during the illness	7	44	16%	5.1%	26.7%
% of children 0-23m with cough and rapid/difficult breathing who received the same amount or more liquids during the illness	31	93	33%	23.8%	42.9%
% of children 0-23m with cough and rapid/difficult breathing who received the same amount or more foods during the illness	17	95	18%	10.2%	22.6%

Discussion and Recommendations (Pneumonia):

Care seeking for children with cough and rapid/difficult breathing was poor at 29%. It was especially poor among infants (14%) when care seeking should be even higher. While this level can vary widely throughout a year, the proportion of children under two with a cough during the two weeks prior to the study seemed particularly high (80%) in relation to KPC data from other PVOs/countries. This could reflect over-reporting, conducting the study at a high-time for ARIs, or generally poor health status.

Feeding during respiratory illness was poor: Only 31% of children 12-23m received the same amount or more liquids when they had a cough and rapid/difficult breathing, and only 16% received the same amount or more food.

Prompt care seeking and feeding during illness should be emphasized in the Care Group educational materials and other material used for education of parents in the project area. Assure that all health workers are trained in the proper recognition, classification and management of children with pneumonia. (The proposal states that IMCI training will be done as part of the project.)

Diarrhea:

INDICATOR OR OTHER DATA	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL	UCL
% of infants with diarrhea who received the same amount or more liquids during the illness	17	52	33%	19.9%	45.4%
% of children 12-23m with diarrhea who received the same amount or more liquids during the illness	11	43	26%	12.5%	38.5%
% of children 0-23m with diarrhea who received the same amount or more liquids during the illness	28	95	29%	20.3%	38.6%
% of infants with diarrhea during the last two weeks who received ORS and/or recommended home fluids	10	56	18%	7.8%	27.9%
% of infants with diarrhea during the last two weeks	51	95	54%	43.7%	63.7%
% of children 12-23m with diarrhea during the last two weeks	44	89	49%	39.1%	59.8%
% of children 0-23m with diarrhea during the last two weeks	95	184	52%	44.4%	58.9%
% of infants with diarrhea who received the same/more food during diarrhea	13	53	25%	12.9%	36.1%
% of children 12-23m with diarrhea who received the same/more food during diarrhea	7	43	16%	5.2%	27.3%
% of mothers of infants who were currently bottle-fed	112	256	44%	37.7%	49.8%
% of mothers of children 12-23m who were currently bottle-fed	116	203	57%	50.3%	64.0%

Discussion and Recommendations (Diarrhea):

Over half (52%) of the children in the study had diarrhea during the previous two-week period, and only 18% of mothers used ORS and home-available fluids (HAFs). 71% of the children received *less* liquid during a recent diarrheal episode. (The percentage of children under two who received *more liquids* during diarrhea was not evaluated due to an error in the objectives table given to the consultant, but it is necessarily less than 29%. This indicator will be analyzed once the data is computerized over the next quarter.) Data from the HFA found that, "oral rehydration solution (ORS) was also appropriately prescribed but its use was not modeled due to unavailability of ORS in the centers and health posts." Only 21% of children under two received the same amount or more food during the diarrheal episode.

One of the largest sources of the diarrhea may be bottle feeding. 44% of infants and 57% of children 12-23m were bottle-fed. During this project, the staff should:

- Conduct an **anti-bottle feeding campaign** (see the nutrition section);
- **Heavily promote increased use of HAFs and ORS for children with diarrhea through the Care Groups**, including demonstrations on how to prepare and administer ORS;
- Have **health staff demonstrate the preparation and administration of ORS** for parents of children with diarrhea;
- **Assure that all health facilities, Institutional Facilitators, and Community Facilitators have a reliable stock of ORS packets**.
- **Assure that all mothers can identify signs of dehydration.**
- Given the high prevalence of severe underweight, **assure that all health facility workers understand how to dilute ORS for children with kwashiorkor** (following guidance in the new WHO manual[32] on management of severe malnutrition).

[32] See http://www.who.int/nut/documents/manage_severe_malnutrition_eng.pdf

Household Water & Sanitation:

INDICATOR OR OTHER DATA	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL	UCL
% of mothers of infants who use water and soap/ash to wash their hands	150	257	58%	52.3%	64.4%
% of mothers of children 12-23m who use water and soap/ash to wash their hands	117	203	58%	50.8%	64.4%
% of mothers of infants who mentioned at least two correct times when hands should be washed when asked when they wash their hands	78	241	32%	26.5%	38.3%
% of mothers of children 12-23m who mentioned at least two correct times when hands should be washed when asked when they wash their hands	74	204	36%	29.7%	42.9%
% of mothers with children age 0–23 months who report that they wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated – *Not assessed by consultant; alternate indicator used (see below)*	-	-	-		
% of mothers of children 0-23m who mentioned at least two correct times when they wash their hands	152	445	34%	29.8%	38.6%

Discussion and Recommendations (Water & Household Sanitation):
Handwashing was somewhat higher than expected, but still poor. Only 34% of mothers of children 0-23m mentioned at least two of the four times when they should wash their hands. Handwashing and other hygienic practices should be included in the Care Group curricula.

Immunizations:

INDICATOR OR OTHER DATA	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL	UCL
% of mothers with children age 0–23 months who received at least two tetanus toxoid injections before the birth of their youngest child [RapidCATCH indicator]	40	256	16%	11.2%	20.1%
% of children age 13–23[33] months who are fully vaccinated (with BCG, DPT3, OPV3 y SPR/SR) before the first birthday [cf: RapidCATCH indicator]	85	203	42%	35.1%	48.7%
% of children age 12–23 months who received a measles vaccine [RapidCATCH indicator]	101	203	50%	42.9%	56.6%

Discussion and Recommendations (Immunizations):
The fully immunized rate of children 12-23m was higher than expected (in the proposal) at 42%. Several supervision area (SM1, SM5, and SM6) were significantly below the average coverage for the project area. One supervision areas (SM2) has already met or exceeded the objectives

[33] In Guatemala, children are given measles vaccine when they are 12m of age, so this indicator was evaluated for the 13-23m old group rather than the 12-23m old group.

stated in the proposal (75% coverage), and C4 may have, as well. Only 16% of mothers were immunized with at least two doses of TT. Nine of the 14 supervision areas have already met or exceeded the final objective level set in the proposal (25%), thus **the final objective level (target) should be revised for the TT indicator from 25% to 45%**.

HIV/AIDS:

INDICATOR OR OTHER DATA	Numerator	Denominator	%	CONFIDENCE INTERVAL	
				LCL	UCL
% of mothers of infants who have heard of a disease called AIDS	126	252	50%	43.8%	56.2%
% of mothers of children 12-23m who have heard of a disease called AIDS	87	200	44%	36.6%	50.4%
% of mothers of infants who have heard of AIDS who believe that it is possible to prevent it	75	228	33%	26.8%	39.0%
% of mothers of children 12-23m who have heard of AIDS who believe that it is possible to prevent it	56	166	34%	26.5%	40.9%
% of mothers of infants who cite at least two known ways of reducing the risk of HIV infection	7	256	3%	0.7%	4.7%
% of mothers of children 12-23m who cite at least two known ways of reducing the risk of HIV infection	6	171	4%	0.8%	6.3%
% of mothers of children 0-23m who cite at least two known ways of reducing the risk of HIV infection [RapidCATCH indicator]	13	427	3%	1.4%	4.7%

Discussion and Recommendations (HIV/AIDS):
About half of mothers have heard of AIDS, but only one-third believe that it can be prevented. Fewer yet (3%) can cite at least two ways to prevent HIV infection. While HIV/AIDS is not a project intervention, and the number of interventions included in the project is already high (six), messages on HIV/AIDS could easily be added to the Care Group curricula late in the project.

Other RapidCATCH Indicators:
Malaria is not a problem in this cool, mountainous project area, so the RapidCATCH indicator on use of insecticide-treated bednets was not included in this KPC.

Problematic Indicators/Data by Supervision Area

The table below shows which supervision area fare better and worse for each indicator. H indicates that the supervision area is **above the final objective level set in the proposal. L indicates that the supervision area is significantly below average coverage for all project areas.**

Indicator or Other Data	Supervision Area															
	SM1	SM2	SM3	SM4	SM5	SM6		C1	C2	C3	C4	C5		SR1	SR2	SR3
% of mothers of infants who had at least two prenatal checks (by any health worker, card verified) during their last pregnancy		H	H	H	L	H		H	H	H	H	H		L	L	H
% of children 0-5m who were exclusively breastfed during the last 24 hours [RapidCATCH indicator]					L											
% of mothers of infants who know at least two dangers signs related to childhood illness					L											
% of non-pregnant mothers of infants who do not want another child (or do not know) who are using a modern method of child spacing	L															
% of non-pregnant mothers of children 12-23m who do not want another child (or do not know) who are using a modern method of child spacing									L							
% of mothers of infants who know at least one place where they can get a method for spacing their births		L			L	L										
% of mothers with children age 0–23 months who received at least two tetanus toxoid injections before the birth of their youngest child [RapidCATCH indicator]	H	H	H	H	L			H	H	H	H	H			L	
% of children age 13–23 months who are fully vaccinated (with BCG, DPT3, OPV3 y SPR/SR) before the first birthday [cf: RapidCATCH indicator]	L	H			L	L					H					
% of mothers of infants who use water and soap/ash to wash their hands					L				L			L				
% of mothers of children 12-23m who use water and soap/ash to wash their hands					L							L				
% of mothers of infants who mentioned at least two correct times when hands should be washed when asked when they wash their hands					L				L							
% of mothers of children 12-23m who mentioned at least two correct times when hands should be washed when asked when they wash their hands			L		L			L								
% of infants who were breastfed during the first hour of life						L										
% of children age 6–9 months who received breastmilk and complementary foods during the last 24 hours [RapidCATCH indicator]										L						L
% of children 12-23m who no longer breastfed												L				
% of children 12-23m who ate a protein food in the last 24 hours		L				L		L	L		L					
% of children 12-23m who ate vitamin A foods during the last 24 hours						L			L		L					
% of children 12-23m who ate iodized salt in the last 24 hours		L						L	L							
% of children 12-23m who received vitamin A during the last six months (mother's report)		L			L							L				

Indicator or Other Data	Supervision Area															
	SM1	SM2	SM3	SM4	SM5	SM6		C1	C2	C3	C4	C5		SR1	SR2	SR3
% of children 12-23m who received vitamin A during the last six months (card verified)	L				L	L										
% of mothers who encourage/give incentives to their infant to eat when s/he does not want to eat										L		L				
% of mothers who encourage/give incentives to their child 12-23m to eat when s/he does not want to eat								L								
% of infants currently bottle fed								L		L		L				
% of children 12-23m currently bottle fed								L								
% of infants weighed in the last four months											L	L				
% of children 12-23m weighed in the last four months											L					
% of infants with a weight/height card											L					
% of children 12-23m with a weight/height card											L					
% of infants who were sick with diarrhea, dysentery, cough, or difficult or rapid breathing at the time of the survey								L							L	
% of children 12-23m who were sick with diarrhea, dysentery, cough, or difficult or rapid breathing at the time of the survey					L											
% of children 0-23m with diarrhea during the last two weeks					L				L			L				
% of children 0-23m who had an illness with cough in the last two weeks	L					L										
% of mothers of infants who had at least two prenatal checks (by any health worker, card verified) during their last pregnancy			L												L	
% of mothers of infants who had a prenatal card for their last pregnancy	L				L									L		L
% of mothers of infants who received/bought iron tablets/syrup during their last pregnancy.					L										L	L
% of mothers of infants who ate the same amount or more food than usual during their last pregnancy								L								
% of mothers of infants who had a postnatal check-up following their last pregnancy					L											
% of mothers of infants who have heard of a disease called AIDS				L	L			L							L	
% of mothers of children 12-23m who have heard of a disease called AIDS				L	L											
% of mothers of infants who have heard of AIDS who believe that it is possible to prevent it				L	L											
% of mothers of children 12-23m who have heard of AIDS who believe that it is possible to prevent it				L	L											

	Supervision Areas Faring Better and Worse															
	SM1	SM2	SM3	SM4	SM5	SM6		C1	C2	C3	C4	C5		SR1	SR2	SR3
Number of indicators that were significantly below average in each Supervision Area:	6	5	2	4	24	9		9	7	3	6	8		2	7	3
Number of indicators for which final objective levels have already been achieved, by SA:	1	3	2	2	0	1		2	2	2	3	2		0	0	1

Indicator or Other Data	Supervision Area														
	SM1	SM2	SM3	SM4	SM5	SM6		C1	C2	C3	C4	C5		SR1	SR2	SR3
Difference	5	2	0	2	24	8		7	5	1	3	6		2	7	2
Top Quartile, Look for Reasons for Success		*	*	*						*				*		*
Bottom Quartile, Give Special Attention					*	*		*							*	

Supervision areas that fared the best were SM2, SM3, SM4, C3, SR1, and SR3. Supervision areas with the fared the poorest were SM5, SM6, C1, and SR2. SM5 had the worst performance. SM5 scored significantly below average coverage for 24 (59%) of the 41 indicators assessed above. It appears that the main reason for such poor performance in SM5 is that that jurisdiction (Cheche) is the most isolated of all supervision areas. The first road into the area was placed six months ago, and that road only reaches several of the communities in the area. Given that the presence of roads appears to be strongly related to many of our project indicators, we will share the LQAS data from this study – and use it ourselves – to advocate for more government construction of roads in the area.

Intervention areas that may have the poorest equity were calculated (using Ls per indicator). The intervention areas that probably have the **poorest equity were HIV/AIDS, EPI, and Maternal and newborn care.** Areas with the **best equity** (fewest Ls per indicator) **were Water and sanitation, child spacing, and IMCI/Diarrhea/Pneumonia**. This information has been given to the local project staff working in each supervision area so that each supervisor will know the weak areas of his or her supervision areas, and so that resources can be directed appropriately among the supervision areas.

Action Plan for Community Feedback and Dissemination of Findings

This KPC Report is being distributed to all project stakeholders in Guatemala and the U.S., including Area and District MOH officials, health facility staff, community leaders, other PVOs, USAID/Guatemala, USAID Global Bureau, and local media sources.

Presentations of the data will be conducted with the MOH officials, health facility staff and community leaders. All women in the project area will receive brief reports on the key indicators for each intervention as behavior change communication on each intervention is introduced through the Care Groups. For example, when the nutrition topics are covered, mothers in the Care Groups will receive information on the level of malnutrition, and indicators related to child feeding. They will take this information into the homes of each of the mothers that they serve using small flipcharts (as they will do with other educational topics). This information will be presented to mothers and other caregivers in the household visually using “tortilla charts” (similar to pie charts, these were field-tested by Save the Children in Haiti). The authors of this report would like to thank all of the people involved in this KPC for their time and effort, and hope that the use of these results will lead to a more effective child survival project.

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Annex 1

CURAMERICAS - FUMESDER
PROYECTO SOBREVIVENCIA INFANTIL

Huehuetenango, Guatemala

CUESTIONARIO 0 a 11 Meses

Encuesta Familiar Dirigida a Madres con Hijos Menores de Un Año
Conocimientos, Actitudes y Coberturas sobre el Cuidado de los Niños Menores de Un Año

a. Saludar y presentarse a la persona que está en casa.
b. Pregunte si la mama de los niños se encuentra.
c. ***Si no hay niños***, procede a la próxima casa (más cercana).
d. ***Si hay dos madres de niños menores de 2 año que viven en la casa***, pregunta las edades de sus niños. Si los dos tiene por lo menos un niño abajo de 2 años, selecciona una al azar (usar una moneda), y continuar abajo, paso "e".
e. ***Si la madre está en casa*:**
   - Pregunte las edades de sus niños que viven en la casa con ella.
   - Si hay un niño menor de 12 meses, pasar al *consentimiento* para explicar el propósito de la encuesta.
   - Si hay un niño (o más) entre 12 y 23 meses, y no hay niños 0-11 meses, aplicar el **CUESTIONARIO 12 a 23 MESES**.
   - Si hay un niño (o más) entre 0 y 11 meses de edad en la casa, y otro niño (o más) entre 12 y 23 meses de edad, selecciona uno de los niños al azar (usar una moneda), y usar el cuestionario correcto.

f. ***Si la madre no está en casa:***
   - Pregunta a la persona en casa sobre las edades de sus niños que viven con ella en la casa.
   - Si la madre tiene por lo menos un niño menor de 2 años, pregunta donde está la madre y cuando regresa.
     - Si la madre está más de 30 minutos de la casa, procede a la próxima madre, y llenar el formulario de *Madres no Encontradas/Entrevistadas* para esta mama.
     - Si la madre está menos de 30 minutos de la casa, búscale y hacer la entrevista donde ella está.
     - Regresa a su casa para seleccionar otra casa si tiene que seleccionar otro niño todavía en el área.

g. ***Si la(s) madre(s) no tiene por lo menos un niño menor de 2 años,*** ir a la próxima casa.

CONSENTIMIENTO

Explicar a la madre: Mi nombre es _____ y trabajo conjunto con la Curamericas y el Ministerio de Salud Pública. Estamos realizando una encuesta de salud de niños en la zona. Su participación de más o menos 30 minutos puede ayudarnos y su comunidad, y todo usted me diría estará confidencial. Tiene el derecho para no participar en la encuesta, también. ¿Puede usted participar en la encuesta?
SI DICE QUE SÍ → Firma abajo, y seguir con la entrevista
SI DICE QUE NO → Ir a la próxima madre y llenar el formulario de Madres no Encontradas/Entrevistadas.

Firma del Encuestador: _____ Fecha: _____/_____/_____

¡LLENAR HOJA FORMULARIO PARA REGISTRAR ENCUESTADOS NO ENCONTRADOS!

Nombre de la madre: _____ _____ _____ _____
Primer nombre 1 Primer nombre 2 Apellido 1 Apellido 2

IDENTIFICACION	
NÚMERO DE JURISDICCIÓN	_____ _____
NÚMERO DE ENTREVISTA	_____ _____ _____
NúMERO DE CASA	_____ _____ _____

IDENTIFICACION	
1. NÚMERO DE JURISDICCIÓN	_____ _____
2. NÚMERO DE ENTREVISTA	_____ _____ _____
3. NÚMERO DE CASA	_____ _____ _____

4.	**Fecha de la Entrevista**	____/_____/_____ dd mm aaaa
5.	**Nombre del Encuestador**	_____
6.	Nombre del Supervisor	_____
7.	**Nombre de la Comunidad**	_____
8.	**Iniciales de la madre**	____ ____ ____ ____
9.	**¿Cuantos años ha cumplido usted?**	_____ años
10.	Nombre del niño seleccionado para la entrevista **(SI TIENE UN NIÑO EN CADA GRUPO DE EDAD, ESCOGER AL AZAR UN NIÑO**)	_____
11.	**Sexo de este niño**	❑ Masculino ❑ Femenino
12.	**Fecha de nacimiento de este niño**	_____/_____/_____ **dd mm aaaa**
13.	**Edad en meses de este niño**	_____ meses (*Usa 0 si no ha cumplido un mes. Si la madre no recuerda su fecha de nacimiento ni su edad en meses, usa el calendario de eventos para determinar la edad en meses*.)

(Nota a encuestador: Hablaremos solamente de este niño/a durante toda la entrevista.)

(Diga:) Como le mencioné, este entrevista tiene que ver con su salud y la salud de *[NOMBRE DEL NIÑO]*. Por favor, saca todo documento (tarjetas/carnets/hojas/fichas de salud) que tenga de (nombre del niño/a) -- vacunación, control de citas, crecimiento/peso, entrega de alimentos – y las que corresponde a usted y su embarazo con *[NOMBRE DEL NIÑO]*. Esto nos ayudará a contestar algunas preguntas.

MODULO 1A: AGUA Y SANEAMIENTO

No.	Preguntas	Codificación	Saltos
14.	¿Con que se lavan las manos?	1. Con agua solamente ----------→ 2. Con agua y jabón o con ceniza 3. Otro ----------→ (ESPECIFICAR: _____)	**#16** **#16**
15.	*(Si la respuesta es con jabón o ceniza:)*, ¿en que momentos se lava las manos con jabón o ceniza?	(*Puede marcar varias opciones*) a. Nunca b. Antes de preparar alimentos c. Antes de dar de comer a los niños d. Después de hacer necesidades e. Después de cambiar los pañales o limpiar la nalga del niño x. Otro _____	

INFORMACION SOBRE LA ENTREVISTADA Y EL HOGAR

No.	Preguntas	Codificación	Saltos
16.	¿Tuvo la oportunidad de estudiar usted?	**1.** Sí **2.** No----------→	 **#18**
17.	¿Por cuantos años asistió clases?	Años de educación cumplidos _____ (si nunca estudio, marcar 0)	
18.	¿Cuales idiomas habla usted?	(*Puede marcar varias opciones*) a. Español b. Acateca c. Chuj d. Mam e. Otro _____	
19.	¿En cual idioma es más cómodo/fácil para expresarse/comunicar con otros?	(*Marcar sola una opción*) 1. Español 2. Acateca 3. Chuj 4. Mam 5. Otro _____	

OTRA INFORMACIÓN

No.	Preguntas	Codificación	Saltos
20.	¿El padre de *[NOMBRE DEL NIÑO]* vive en esta casa?	1. Sí 2. No 3. No sabe	
21.	¿Usted trabaja afuera de la casa para ganar dinero?	1. Sí 2. No	
22.	¿A que se dedica usted?	(*Puede marcar varias opciones*) a. Ama de casa (no trabaja afuera de la casa) b. Artesana c. Obrera agrícola d. Vende comida e. Trabaja en una tienda/vendedora f. Empleada doméstica g. Trabajadora asalariada x. Otro _____	
23.	¿Quien le cuida a *[NOMBRE DEL NIÑO]* cuando usted no esta en casa?	(*Puede marcar varias opciones*) a. Madre (entrevistada)/nunca le deja b. Esposo/"compañero" c. Hijos mayores d. Otro pariente_____ e. Vecino/amigo _____ f. Empleada/niñera g. Jardín/guardaría/escuela x. Otro _____	

MODULO 2: LACTANCIA MATERNA, ALIMENTACION Y MICRONUTRIENTES

No.	Preguntas	Codificación	Saltos
24.	¿Ha dado pecho a *[NOMBRE DEL NIÑO]*?	1. Sí 2. No ---------- →	**#27**
25.	Después de parto, ¿en que momento le dio de mamar a *[NOMBRE DEL NIÑO]*?	1. De inmediato/dentro del primera hora 2. Después de la primera hora 3. No recuerda	
26.	¿Actualmente le está dando pecho a *[NOMBRE DEL NIÑO]*?	1. Sí 2. No	
27.	¿Cuántas veces comió o mamó ayer durante el día y la noche *[NOMBRE DEL NIÑO]*?	Pecho: ____ veces Pacha: ____ veces Tiempos de comida/ refacción: _____veces	

<table>
<tr><th>No.</th><th>Preguntas</th><th>Codificación</th><th>Saltos</th></tr>
<tr><td>28.</td><td>¿Cuales son todas los alimentos/bebidas qué comió y bebió ayer durante el día y noche [NOMBRE DEL NIÑO]?</td><td>(Escribir aquí todo lo que diga:)</td><td></td></tr>
<tr><td>29.</td><td>Ahora, vamos a ser más específicos. Voy a leer unas comidas y bebidas, y quisiera que me diga si los comió o bebió [NOMBRE DEL NIÑO] ayer durante el día o la noche.</td><td>
Leer cada comida y marcar con X lo que afirma la madre
<table>
<tr><th></th><th></th><th>Sí</th><th>No</th></tr>
<tr><td>A</td><td>Amamantarlo</td><td></td><td></td></tr>
<tr><td>B</td><td>Café</td><td></td><td></td></tr>
<tr><td>C</td><td>Té/agüitas claras/refrescos</td><td></td><td></td></tr>
<tr><td>D</td><td>Leche (de cabra, polvo o vaca)</td><td></td><td></td></tr>
<tr><td>E</td><td>Algo con tomates o pasta de tomates</td><td></td><td></td></tr>
<tr><td>F</td><td>Granos (maíz, tortilla, arroz, avena, mosh, pan, pasta, incaparina, pinolillo, cebada)</td><td></td><td></td></tr>
<tr><td>G</td><td>Calabaza, camote amarillo, zanahoria, guicoyito, guisquil</td><td></td><td></td></tr>
<tr><td>H</td><td>Comida hecha con tubérculos (papa, yuca)</td><td></td><td></td></tr>
<tr><td>I</td><td>Hojas verdes (hoja de rábano, quelite, hierba buena, cilantro)</td><td></td><td></td></tr>
<tr><td>J</td><td>Verduras o frutas amarillas (zanahorias, ayote, mango, papaya)</td><td></td><td></td></tr>
<tr><td>K</td><td>Otras frutas (manzana, banano, aguacate, durazno)</td><td></td><td></td></tr>
<tr><td>L</td><td>Carnes (pescado, pollo, res, huevo)</td><td></td><td></td></tr>
<tr><td>M</td><td>Leguminosas (frijoles, lentejas, manía o soya)</td><td></td><td></td></tr>
<tr><td>N</td><td>Cuajada, mantequilla o crema, queso, yogur</td><td></td><td></td></tr>
<tr><td>O</td><td>Comida hecho con aceite, manteca, mantequilla</td><td></td><td></td></tr>
<tr><td>P</td><td>Cualquier otro alimento que no mencioné</td><td></td><td></td></tr>
<tr><td>Q</td><td>Sal CON YODO (VERIFICAR)</td><td></td><td></td></tr>
<tr><td></td><td>(ESPECIFICAR: _____)</td><td></td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>30.</td><td>¿Ha recibido [NOMBRE DEL NIÑO] vitamina A durante las últimas 6 meses? (mostrar cápsula)</td><td>1. Sí
2. No
8. No sabe</td><td></td></tr>
<tr><td>31.</td><td>¿Tiene tarjeta donde esta anotado los datos de vitamina A de [NOMBRE DEL NIÑO]? (Buscar en las tarjetas que tiene la madre.)</td><td>1. Sí Anote fecha ultima dosis ____/____/____
2. No</td><td></td></tr>
<tr><td>32.</td><td>¿Usted recibió vitamina A durante los dos meses después de su último parto? (mostrar cápsula)</td><td>1. Sí
2. No
8. No sabe</td><td></td></tr>
<tr><td>33.</td><td>¿Tiene tarjeta donde está anotado los datos de vitamina A de usted? (Buscar en las tarjetas que tiene la madre.)</td><td>1. Sí → Anote fecha ultima dosis ____/____/____
2. No</td><td></td></tr>
<tr><td>34.</td><td>¿Si [NOMBRE DEL NIÑO] no quiere comer, que hace usted normalmente?</td><td>1. Animar/dar un incentivo al niño
2. No le doy de comer
3. Le doy de comer a la fuerza
4. Nunca rehúsa/siempre quiere comer</td><td></td></tr>
<tr><td>35.</td><td>¿Está dando la mamadera (pacha) al niño actualmente?</td><td>1. Sí
2. No
8. No sabe</td><td></td></tr>
</table>

MODULO 3: MONITOREO DE CRECIMIENTO

(Diga:) Para conocer mas sobre los controles que ha recibido (nombre del niño/a), me gustaría revisar los carnet de el/ella. ¿Los podría sacar por favor?

No.	Preguntas	Codificación	Saltos
36.	¿Ha sido pesado *[NOMBRE DEL NIÑO]* en los últimos 4 meses?	1. Sí 2. No	
37.	¿Tiene una ficha del niño menor donde anota sus datos de peso/talla para *[NOMBRE DEL NIÑO]*?	1. Sí 2. Carnet no está disponible/perdido 3. Nunca tuvo carnet 4. No sabe	

MODULO 4B: ASISTENCIA DOMICILIAR Y ATENCION AL NIÑO ENFERMO

No.	Preguntas	Codificación	Saltos
38.	A veces, los niños se enferman ... ¿Cuáles son los motivos/causas/razones que le haría salir a buscar atención médica para un hijo suyo?	(*Puede marcar varias opciones)* a. No sé b. Cuando se ve mal o cuando no juega normalmente c. No come, no bebe o no mama d. Esta aletargado y no quiere despertarse e. Calentura alta f. Respiración rápida o dificultosa g. Vomita todo h. Convulsiona i. Otro _____ j. Otro _____ k. Otro _____	
39.	¿Ha estado enfermo *[NOMBRE DEL NIÑO]* con uno de las siguientes enfermedades durante las últimas dos semanas? *(LEER LAS ENFERMEDADES EN LA LISTA.)*	***(Leer esta lista de enfermedades)*** (*Puede marcar varias opciones*) a. Diarrea b. Sangre en el popo c. Tos d. Dificultad de respirar/cansadito e. Respiración rápida o en forma entrecortada y poco profunda f. Otro _____ g. Otro _____ h. Ninguna enfermedad ----------→	*#56*

MODULO 4C: DIARREA

No.	Preguntas	Codificación	Saltos
40.	¿Ha tenido diarrea durante las últimas dos semanas *[NOMBRE DEL NIÑO]*?	1. Sí 2. No ----------→ 3. No sabe ----------→	 **#45** **#45**
41.	¿Que le dio a *[NOMBRE DEL NIÑO]* para tratar la diarrea? ¿Algo más?	(*Puede marcar varias opciones*) a. Nada b. SRO en sobre c. Líquidos disponibles en casa (ej., jugo) d. Píldora o jarabe e. Inyección f. Suero (en vena) g. Remedio casero/hierbas con mucho agua h. Remedio casero/hierbas con poco agua x. Otro _____	
42.	¿Cuando *[NOMBRE DEL NIÑO]* estuvo con diarrea, le dio menos, igual o mayor cantidad de líquidos (incluyendo leche materna) de lo acostumbrado?	1. Menos de lo acostumbrado 2. Igual a lo acostumbrado 3. Mas de lo acostumbrado 4. No le dio líquidos 8. No sabe	
43.	¿Cuando estuvo *[NOMBRE DEL NIÑO]* con diarrea, le dio menos, igual o mayor cantidad de comida/alimentos de lo acostumbrado?	1. Menos de lo acostumbrado 2. Igual a lo acostumbrado 3. Mas de lo acostumbrado 4. No le dio comida/alimentos 8. No sabe	
44.	¿Cuando *[NOMBRE DEL NIÑO]* estaba recuperándose de la diarrea (durante la semana después de estar con diarrea), le dio menos, igual o mayor cantidad de comida de lo acostumbrado?	1. Menos de lo acostumbrado 2. Igual a lo acostumbrado 3. Mas de lo acostumbrado 4. No le dio pecho/comida/alimentos 8. No sabe	

MODULO 4D: INFECCIÓNES RESPIRATORIAS AGUDAS

No.	Preguntas	Codificación	Saltos
45.	¿Ha tenido *[NOMBRE DEL NIÑO]* una enfermedad con tos durante las ultimas dos semanas?	1. Sí 2. No ----------→ 3. No sabe ----------→	 **#56** **#56**
46.	Cuando *[NOMBRE DEL NIÑO]* estuvo con tos, ¿también tuvo dificultad para respirar o estuvo respirando más rápidamente de lo normal?	1. Sí 2. No ----------→ 3. No sabe ----------→	 **#56** **#56**
47.	Cuando *[NOMBRE DEL NIÑO]* estuvo con la tos o tos con respiración rápida, ¿buscó ayuda o el tratamiento?	1. Sí 2. No ----------→	 **#53**

No.	Preguntas	Codificación	Saltos
48.	¿Donde acudió primero para consejos o tratamiento para la tos o tos con respiración rápida de *[NOMBRE DEL NIÑO]*?	ENTIDAD MEDICA 01 Hospital 02 Centro de salud 03 Puesto de salud 04 Centro curativo de un ONG 05 Clínica particular 06 Promotor/guardián de salud 07 Otro tipo de servicio medico _____ OTRO LUGAR 08 Curandero 09 Tienda 10 Farmacia 11 Distribuidora comunal 12 Pariente/amigo 88 Otro _____	
49.	*Vea las respuestas de pregunta #48.* Si 01, 02, 03, 04: Escribir nombre de entidad _____		
50.	*¿A los cuántos días de la aparición de la tos o tos con respiración rápida buscó ayuda?*	0. La misma día 1. El día siguiente 2. Dos días 3. Tres o más días	
51.	Cuando *[NOMBRE DEL NIÑO]* estuvo con la tos o tos con respiración rápida, *¿buscó ayuda o el tratamiento en algún otro lugar?*	1. Sí 2. No ----------→	**#53**
52.	*¿A cual otro lugar fue para ayuda o tratamiento?*	01 Hospital 02 Centro de salud 03 Puesto de salud 04 Centro curativo de un ONG 05 Clínica particular 06 Promotor/guardián de salud 07 Otro tipo de servicio medico 08 Curandero 09 Tienda 10 Farmacia 11 Distribuidora comunal 12 Pariente/amigo 88 Otro _____	
53.	*¿Cuales remedios/medicinas le dio a* [NOMBRE DEL NIÑO]*?*	(*Puede marcar varias opciones*) a. Ningún remedio b. Aspirina c. Panadol d. Antibiótico x. Otro _____ z. No sabe *(preguntar si tiene el frasco)*	

No.	Preguntas	Codificación	Saltos
54.	*¿Cuando* [NOMBRE DEL NIÑO] *estuvo con tos y respiración rápida, le dio menos, igual o mayor cantidad de líquidos (incluyendo la leche materna) de lo acostumbrado?*	1. Menos de lo acostumbrado 2. Igual a lo acostumbrado 3. Más de lo acostumbrado 4. No le dio líquidos 9. No sabe	
55.	*¿Cuando estuvo* [NOMBRE DEL NIÑO] *con tos y respiración rápida, le dio menos, igual o mayor cantidad de comida/alimentos de lo acostumbrado?*	1. Menos de lo acostumbrado 2. Igual a lo acostumbrado 3. Más de lo acostumbrado 4. No le dio comida/alimentos 9. No sabe	

MODULO 5A. CUIDADOS DE LA MUJER GESTANTE

Diga: Para conocer mas sobre los controles que usted hizo durante el embarazo de* [NOMBRE DEL NIÑO], *me gustaría revisar los carnet que usted tiene. Me podría mostrar los carnet suyos?

No.	Preguntas	Codificación	Saltos
56.	¿Quien le atendió para los controles de embarazo o cuidados prenatales durante su embarazo con *[NOMBRE DEL NIÑO]*? *Si le atendió alguien, diga: ¿le atendió o vio con otra persona? ¿Alguien más?*	(*Puede marcar varias opciones*) a. Doctor b. Enfermera/comadrona profesionalizada d. Partera/Comadrona e. Guardián/promotor de salud x. Otro _____ z. Nadie ----------→	**#58**
57.	¿Cuantos controles se hizo usted durante su último embarazo?	____ controles	
58.	Antes de que nazca *[NOMBRE DEL NIÑO]*, ¿recibió usted una inyección en el brazo (tétano toxoide/TT) para prevenir que le de tétano (convulsiones) el bebe?	1. Sí 2. No 8. No sabe	
59.	¿Tiene usted un carnet del último embarazo?	1. Sí, encuestador lo vio 2. No lo tiene disponible ----------→ 3. Nunca tuvo carnet----------→	 **#62** **#62**
60.	*Anote número de controles que se hizo durante en el embarazo de (nombre del niño/a).*	____ controles ____ No tiene carnet	

No.	Preguntas	Codificación	Saltos
61.	*Anote información sobre las dosis de TT (toxoide tetánico) recibido por la madre.*	Escribir la fecha de cada inyección de TT recibido (día/mes/año) ____/____/____ ____/____/____ ____/____/____ ____/____/____ ____/____/____ ____/____/____ _____ No tiene carnet	
62.	¿Que problemas o señas de peligro durante el embarazo harían que usted buscara ayuda urgentemente con el personal de salud?	(*Puede marcar varias opciones*) a. Fiebre b. No poder respirar bien/falta de aire c. Sangrado d. Hinchazón de los pies, cara, cuerpo x. Otro z. No sabe	
63.	Durante su último embarazo, ¿usted recibió o compro tabletas o jarabe de hierro? ***(mostrar tableta/jarabe)***	1. Sí 2. No 8. No sabe	
64.	¿Por cuantos tiempo tomo las tabletas o jarabe de hierro?	_____ días _____ semanas _____ meses ❑ No se acuerda	
65.	Durante su último embarazo, ¿comió menos, igual, o mayor cantidad de comida/alimentos de lo acostumbrado?	1. Menos de lo acostumbrado 2. Igual a lo acostumbrado 3. Mas de lo acostumbrado 4. No sabe / no recuerda	

MODULO 5B: PARTO Y CUIDADO DEL RECIEN NACIDO

No.	Preguntas	Codificación	Saltos
66.	¿Donde fue atendido el parto de *[NOMBRE DEL NIÑO]*?	11 Casa de entrevistada 12 Casa de otra persona 21 Hospital 22 Centro de Salud 23 Centro curativo/clínica de un ONG 24 Puesto de Salud 25 Otra entidad medica _____ 96 Otro _____	
67.	*Vea las respuestas de pregunta #66.* Si 21, 22, 23, 24: Escribir nombre de la entidad _____		

No.	Preguntas	Codificación	Saltos
68.	¿Quien le atendió durante su último parto?	(*Puede marcar varias opciones*) a. Doctor b. Enfermera/comadrona profesionalizada c. Partera/Comadrona d. Guardián/promotor de salud e. Alguien de la familia f. Otro _____ g. Nadie	

MODULO 5C: CUIDADOS POST-NATALES

No.	Preguntas	Codificación	Saltos
69.	¿Cuales son las señas que indica que un recién nacido está enfermo?	(*Puede marcar varias opciones*) a. No come bien b. Respiración rápida c. No activa d. Área del cordón rojo e. Ojo con flujo/ojo rojo x. Otro _____ z No sabe	
70.	Después del parto de *[NOMBRE DEL NIÑO]*, ¿alguien le chequeo la salud de usted?	1. Sí 2. No ----------→	**#73**
71.	Después de que nazca *[NOMBRE DEL NIÑO]*, ¿al cuanto tiempo hizo el primer chequeo de usted?	_____ días _____ semanas _____ No sabe/no se acuerda Escribir 00 si fue el mismo día	
72.	Quien hizo el chequeo post-natal a usted? *Indague para descubrir persona mas calificada*	1. Doctor 2. Enfermera/comadrona profesionalizada 3. Auxiliary midwife 4. Partera/comadrona 5. Otro _____	
73.	¿Cuales problemas o señas de peligro durante los 40 días después del parto (la cuarentena) harían que usted buscara ayuda urgentemente con personal de salud?	(*Puede marcar varias opciones*) a. Fiebre b. Sangrado c. Flujo vaginal con mal olor x. Otro _____ z. No sabe	

MODULO 6: ESPACIMIENTO DE EMBARAZOS

Diga: Ahora solamente nos falta pocas preguntas. Algunas de las preguntas son personales y de temas sensibles. Le hago acuerdo que no hay problema si usted no desea contestar cualquier pregunta.

No.	Preguntas	Codificación	Saltos
74.	**¿Cuantos niños menores de cinco años viven en esta casa?**	_____ niños menores de cinco	
75.	**¿Cuantos de estos niños son suyos propios?**	_____ niños biológicos	

No.	Preguntas	Codificación	Saltos
76.	**¿Puede decirme el sexo y la fecha de nacimiento de sus dos hijos más chiquitos?**	**Niño #1 (hijo menor)** nombre _____ 1 Masculino____ 2 Femenino ____ Fecha de nacimiento (día/mes/año) ____/____/____ Edad en meses _____ **Niño #2** nombre _____ 1 Masculino____ 2 Femenino ____ Fecha de nacimiento (día/mes/año) ____/____/____ Edad en meses _____	
77.	Actualmente, ¿está embarazada?	1. Sí ----------→ 2. No 8. No sabe/no esta segura	**#81**
78.	¿Quiere tener otro niño?	1. Sí ---------- → 2. No ---------- → 8. No sabe ----------→	**#81** **#80** **#80**
79.	¿Dentro de cuanto tiempo piensa tener otro hijo?	1. Dentro de los siguientes dos años 2. Mas de dos años 8. No esta segura	
80.	Actualmente, ¿que hace usted para espaciar sus embarazos (no quedarse embarazada) (que hace usted o su esposo para protegerse contra el embarazo)?	(*Marcar una opción solamente – el método más usado.)* 01 Ningún método 02 Norplant/implantes bajo de la piel 03 Inyección/DepoProvera 04 Píldoras/pastillas anticonceptivas 05 T de Cobre/Dispositivo Intrauterino (DIU) 06 Diafragma 07 Condón 08 Espuma/gel/espermicida/óvulo/crema/ tableta 09 Esterilización quirúrgica femenina 10 Esterilización quirúrgica masculina/ Vasectomía 11 Método de la amenorrea de la lactancia (MELA) 12 Ritmo/calendario/moco cervical/ temperatura basal/collar 13 Abstinencia 14 Coito interrumpido 96 Otro	

No.	Preguntas	Codificación	Saltos
81.	Me gustaría preguntar sobre los recursos disponibles en la comunidad para espacimiento de embarazos. Usted sabe donde puede conseguir un método para espaciar los embarazos (para no quedarse embarazada)?	(*Puede marcar varias opciones*) b. Hospital c. Centro de Salud d. Centro curativo/clínica de un ONG e. Puesto de salud f. Clínica de planificación familiar g. Guardián/promotor de salud h. Farmacia i. Otra entidad medica/clínica _____ j. Tienda k. Iglesia l. Amigo/pariente x. Otro _____ y. No sabe	

MODULO 7: CONOCIMIENTO SOBRE HIV/SIDA

No.	Preguntas	Codificación	Saltos
82.	¿Ha escuchado de una enfermedad que se llama "SIDA"?	1. Sí 2. No ---------- →	**#85**
83.	¿Es posible protegerse del SIDA?	1. Sí 2. No ---------- →	**#85**
84.	¿Cómo cree que se proteja contra el SIDA? **Diga: Algo mas para protegerse contra SIDA?**	(*Puede marcar varias opciones*) a. No teniendo sexo b. Usando preservativos/condones c. Teniendo sexo con una sola persona/ ser fiel a una sola persona d. Limitar numero de personas con quien tiene relaciones sexuales e. No tener sexo con prostitutas f. No tener sexo con personas quienes mantienen muchas relaciones sexuales g. No tener sexo con personas quienes mantienen relaciones sexuales con personas del mismo genero (sexo homosexual) h. No tener sexo con personas quienes inyectan drogas i. No tener transfusiones de sangre j. No recibir inyecciones k. No besar l. No contacto con mosquitos/zancudos m. Buscar protección de los curanderos n. No compartir equipo de rasurar w. Otro _____ x. Otro _____ z. No sabe	

OTRO: CAPACITACION PREVIA EN SALUD

No.	Preguntas	Codificación	Saltos
85.	¿Ha recibido charlas o pláticas de salud en los últimos tres meses?	1. Sí 2. No	

ANTROPOMETRÍA

No.	Preguntas	Codificación	Saltos
86.	ENTREVISTADOR: PESA AL NIÑO, Y MARCAR EL PESO DEL NIÑO AQUÍ	Peso: _____.___ libras (**Anotar con fracciones de 0.25 libras**)	
87.	ENTREVISTADOR: VERIFICAR SI HAY EDEMA (HINCHAZÓN) EN AMBOS PIES.	1. Sí, hay edema en los dos pies 2. No, no hay edema en los dos pies 3. No sabe	

REVISAR EL CUESTIONARIO
Agradezca la colaboración!

Comentarios:

_____

Firma del Supervisor: _____

CURAMERICAS - FUMESDER
PROYECTO SOBREVIVENCIA INFANTIL

Huehuetenango, Guatemala

CUESTIONARIO 12 a 23 Meses

Encuesta Familiar Dirigida a Madres con Hijos 12 a 23 Meses
Conocimientos, Actitudes y Coberturas sobre el Cuidado de los Niños Entre 12 y 23 Meses

h. (Cuando ya ha usado el cuestionario de 0 a 11 meses en un área, proceder a la próxima casa para usar este cuestionario. ¡NO SE DEBE USAR LOS DOS CUESTIONARIOS EN LA MISMA CASA!)

i. Verificar las edades de los niños en la casa. Si hay un niño 12 a 23 meses, usa este cuestionario. Si no hay niños de 12 a 23 meses, pasa a la próxima casa. Si hay más de un niño 12 a 23 meses, selecciona uno al azar (usar una moneda).

j. *Si la madre de este niño está en casa*:

- Pasar al *consentimiento* para explicar el propósito de la encuesta y continuar con la encuesta.

k. Si la madre no está en casa:

- Si la madre está más de 30 minutos de la casa, procede a la próxima madre, y llenar el formulario de *Madres no Encontradas/Entrevistadas* para esta mama.
- Si la madre está menos de 30 minutos de la casa, búscale y hacer la entrevista donde ella está.
- Regresa a su casa para seleccionar otra casa si tiene que seleccionar otro niño en el área todavía.

l. ***Si la(s) madre(s) no tiene por lo menos un niño entre 12 y 23 meses,*** ir a la próxima casa.

CONSENTIMIENTO

Explicar a la madre: Mi nombre es _____ y trabajo conjunto con la Curamericas y el Ministerio de Salud Pública. Estamos realizando una encuesta de salud de niños en la zona. Su participación de más o menos 30 minutos puede ayudarnos y su comunidad, y todo usted me diría estará confidencial. Tiene el derecho para no participar en la encuesta, también. ¿Puede usted participar en la encuesta?
SI DICE QUE SÍ → Firma abajo, y seguir con la entrevista
SI DICE QUE NO → Ir a la próxima madre y llenar el formulario de Madres no Encontradas/Entrevistadas.

Firma del Encuestador: _____ Fecha: _____/_____/_____

¡LLENAR HOJA FORMULARIO PARA REGISTRAR ENCUESTADOS NO ENCONTRADOS!

Nombre de la madre: _____ _____ _____ _____
Primer nombre 1 Primer nombre 2 Apellido 1
Apellido 2

IDENTIFICACION	
NÚMERO DE JURISDICCIÓN	_____ _____
NÚUMERO DE ENTREVISTA	_____ _____ _____
NÚUMERO DE CASA	

IDENTIFICACION	
1. NÚMERO DE JURISDICCIÓN	_____ _____
2. NÚMERO DE ENTREVISTA	_____ _____ _____
3. NÚMERO DE CASA	_____ _____ _____

4.	**Fecha de la Entrevista**	____/____/____ dd mm aaaa
5.	**Nombre del Encuestador**	_____
6.	Nombre del Supervisor	_____
7.	**Nombre de la Comunidad**	_____
8.	**Iniciales de la madre**	____ ____ ____ ____
9.	**¿Cuantos años ha cumplido usted?**	_____ años
10.	Nombre del Niño seleccionado para la entrevista **(SI TIENE UN NIÑO EN CADA GRUPO DE EDAD, ESCOGER AL AZAR UN NIÑO)**	_____
11.	**Sexo de este niño**	❑ Masculino ❑ Femenino
12.	**Fecha de nacimiento de este niño**	_____/_____/_____ **dd mm aaaa**
13.	**Edad en meses de este niño**	_____ meses (*Usa 0 si no ha cumplido un mes. Si la madre no recuerda su fecha de nacimiento ni su edad en meses, usa el calendario de eventos para determinar la edad en meses.*)

(Nota a encuestador: Hablaremos solamente de este niño/a durante toda la entrevista.)

(Diga:) Como le mencioné, este entrevista tiene que ver con su salud y la salud de *[NOMBRE DEL NIÑO]*. Por favor, saca todo documento (tarjetas/carnets/hojas/fichas de salud) que tenga de (nombre del niño/a) -- vacunación, control de citas, crecimiento/peso, entrega de alimentos – y las que corresponde a usted y su embarazo con *[NOMBRE DEL NIÑO]*. Esto nos ayudará a contestar algunas preguntas.

MODULO 1A: AGUA Y SANEAMIENTO

No.	Preguntas	Codificación	Saltos
14.	¿Con que se lavan las manos?	4. Con agua solamente ----------→ 5. Con agua y jabón o con ceniza 6. Otro ----------→ (ESPECIFICAR: _____)	**#16** **#16**
15.	*(Si la respuesta es con jabón o ceniza:)* ¿en que momentos se lava las manos con jabón o ceniza?	(*Puede marcar varias opciones*) f. Nunca g. Antes de preparar alimentos h. Antes de dar de comer a los niños i. Después de hacer necesidades j. Después de cambiar los pañales o limpiar la nalga del niño x. Otro _____	

INFORMACION SOBRE LA ENTREVISTADA Y EL HOGAR

No.	Preguntas	Codificación	Saltos
16.	¿Tuvo la oportunidad de estudiar usted?	**3.** Sí **4.** No----------→	 **#18**
17.	¿Por cuantos años asistió clases?	Años de educación cumplidos _____ (si nunca estudio, marcar 0)	
18.	¿Cuales idiomas habla usted?	(*Puede marcar varias opciones*) f. Español g. Acateca h. Chuj i. Mam j. Otro _____	
19.	¿En cual idioma es más cómodo/fácil para expresarse/comunicar con otros?	(*Marcar sola una opción*) 6. Español 7. Acateca 8. Chuj 9. Mam 10. Otro _____	

OTRA INFORMACIÓN

No.	Preguntas	Codificación	Saltos
20.	¿El padre de *[NOMBRE DEL NIÑO]* vive en esta casa?	4. Sí 5. No 6. No sabe	
21.	¿Usted trabaja afuera de la casa para ganar dinero?	3. Sí 4. No	
22.	¿A que se dedica usted?	(*Puede marcar varias opciones*) h. Ama de casa (no trabaja afuera de la casa) i. Artesana j. Obrera agrícola k. Vende comida l. Trabaja en una tienda/vendedora m. Empleada doméstica n. Trabajadora asalariada z. Otro _____	
23.	¿Quien le cuida a *[NOMBRE DEL NIÑO]* cuando usted no esta en casa?	(*Puede marcar varias opciones*) a. Madre (entrevistada)/nunca le deja b. Esposo/"compañero" c. Hijos mayores d. Otro pariente_____ e. Vecino/amigo _____ f. Empleada/niñera g. Jardín/guardaría/escuela x. Otro _____	

MODULO 2: LACTANCIA MATERNA, ALIMENTACION Y MICRONUTRIENTES

No.	Preguntas	Codificación	Saltos
24.	¿Actualmente le está dando pecho a *[NOMBRE DEL NIÑO]*?	3. Sí 4. No	
25.	¿Cuántas veces comió o mamó ayer durante el día y la noche *[NOMBRE DEL NIÑO]*?	Pecho: ____ veces Pacha: ____ veces Tiempos de comida/ refacción: _____veces	
26.	¿Cuales son todas los alimentos/bebidas qué comió y bebió ayer durante el día y noche *[NOMBRE DEL NIÑO]*?	***(Escribir aquí todo lo que diga:)***	

No.	Preguntas	Codificación			Saltos
27.	Ahora, vamos a ser más específicos. Voy a leer unas comidas y bebidas, y quisiera que me diga si los comió o bebió *[NOMBRE DEL NIÑO]* ayer durante el día o la noche.	***Leer cada comida y marcar con X lo que afirma la madre***			
				Sí	**No**
		A	Amamantarlo		
		B	Café		
		C	Té/agüitas claras/refrescos		
		D	Leche (de cabra, polvo o vaca)		
		E	Comió algo con tomates o pasta de tomates?		
		F	Granos (maíz, tortilla, arroz, avena, mosh, pan, pasta, incaparina, pinolillo, cebada)		
		G	Calabaza, camote amarillo, zanahoria, guicoyito, guisquil		
		H	Comida hecha con tubérculos (papa, yuca)		
		I	Hojas verdes (hoja de rábano, quelite, hierba buena, cilantro)		
		J	Verduras o frutas amarillas (zanahorias, ayote, mango, papaya)		
		K	Otras frutas (manzana, banano, aguacate, durazno)		
		L	Carnes (pescado, pollo, res, huevo)		
		M	Leguminosas (frijoles, lentejas, manía o soya)		
		N	Cuajada, mantequilla o crema, queso, yogur		
		O	Comida hecho con aceite, manteca, mantequilla		
		P	Cualquier otro alimento que no mencioné		
		Q	Sal **CON YODO** (VERIFICAR)		
			(ESPECIFICAR: _____)		
28.	¿Ha recibido *[NOMBRE DEL NIÑO]* vitamina A durante las últimas 6 meses? (***mostrar cápsula***)	3. Sí 4. No 9. No sabe			
29.	¿Tiene tarjeta donde esta anotado los datos de vitamina A de *[NOMBRE DEL NIÑO]*? *(Buscar en las tarjetas que tiene la madre.)*	3. Sí Anote fecha ultima dosis ____/____/____ 4. No			

No.	Preguntas	Codificación	Saltos
30.	¿Si *[NOMBRE DEL NIÑO]* no quiere comer, que hace usted normalmente?	5. Animar/dar un incentivo al niño 6. No le doy de comer 7. Le doy de comer a la fuerza 8. Nunca rehúsa/siempre quiere comer	
31.	¿Está dando la mamadera (pacha) al niño actualmente?	3. Sí 4. No 9. No sabe	

MODULO 3: MONITOREO DE CRECIMIENTO

(Diga:) Para conocer mas sobre los controles que ha recibido (nombre del niño/a), me gustaría revisar los carnet de el/ella. ¿Los podría sacar por favor?

No.	Preguntas	Codificación	Saltos
32.	¿Ha sido pesado *[NOMBRE DEL NIÑO]* en los últimos 4 meses?	1. Sí 2. No	
33.	¿Tiene una ficha del niño menor donde anota sus datos de peso/talla para *[NOMBRE DEL NIÑO]*?	1. Sí 2. Carnet no está disponible/perdido 3. Nunca tuvo carnet 4. No sabe	
34.	Tiene una ficha del (nombre del niño/a)? donde esta información sobre desparasitante?	1. Sí 2. Carnet no está disponible/perdido-→ 3. Nunca tuvo carnet----------→	 **#36** **#36**
35.	*Anote información del carnet sobre desparasitante*	Fecha de dosis (dia/mes/año) ___ /___/___ Fecha de dosis (dia/mes/año) ___ /___/___ Fecha de dosis (dia/mes/año) ___ /___/___ Fecha de dosis (dia/mes/año) ___ /___/___	

MODULO 4A: VACUNACIÓN

No.	Preguntas	Codificación	Saltos
36.	Tiene una ficha del (nombre del niño/a)? donde esta información sobre las vacunas?	1. Sí 2. Carnet no está disponible/perdido-→ 3. Nunca tuvo carnet----------→	 **#38** **#38**

37.	Anote la información exactamente como aparece en el carnet de vacunación del niño/a	BCG ____/____/____ Polio, nacimiento ____/____/____ Polio, Primera Dosis____/____/____ Polio, Segunda Dosis____/____/____ Polio, Tercer Dosis____/____/____ DPT (Triple), Primera Dosis____/____/____ DPT (Triple), Segunda Dosis____/____/___ DPT (Triple), Tercera Dosis____/____/____ Anti-Sarampion____/____/____ SPR/Tres Viral____/____/____ Vitamina A (más reciente) ____/____/____	

MODULO 4B: ASISTENCIA DOMICILIAR Y ATENCION AL NIÑO ENFERMO

No.	Preguntas	Codificación	Saltos
38.	A veces, los niños se enferman ... ¿Cuáles son los motivos/causas/razones que le haría salir a buscar atención médica para un hijo suyo?	(*Puede marcar varias opciones)* k. No sé l. Cuando se ve mal o cuando no juega normalmente m. No come, no bebe o no mama n. Esta aletargado y no quiere despertarse o. Calentura alta p. Respiración rápida o dificultosa q. Vomita todo r. Convulsiona s. Otro _____ t. Otro _____ k. Otro _____	
39.	¿Ha estado enfermo *[NOMBRE DEL NIÑO]* con uno de las siguientes enfermedades durante las últimas dos semanas? *(LEER LAS ENFERMEDADES EN LA LISTA.)*	***(Leer esta lista de enfermedades)*** (*Puede marcar varias opciones*) a. Diarrea b. Sangre en el popo c. Tos d. Dificultad de respirar/cansadito e. Respiración rápida o en forma entrecortada y poco profunda f. Otro _____ g. Otro _____ h. Ninguna enfermedad ----------→	*#56*

MODULO 4C: DIARREA

No.	Preguntas	Codificación	Saltos
40.	¿Ha tenido diarrea durante las últimas dos semanas *[NOMBRE DEL NIÑO]*?	4. Sí 5. No ----------→ 6. No sabe ----------→	 **#45** **#45**
41.	¿Que le dio a *[NOMBRE DEL NIÑO]* para tratar la diarrea? ¿Algo más?	(*Puede marcar varias opciones*) i. Nada j. SRO en sobre k. Líquidos disponibles en casa (ej., jugo) l. Píldora o jarabe m. Inyección n. Suero (en vena) o. Remedio casero/hierbas con mucho agua p. Remedio casero/hierbas con poco agua x. Otro _____	

No.	Preguntas	Codificación	Saltos
42.	¿Cuando *[NOMBRE DEL NIÑO]* estuvo con diarrea, le dio menos, igual o mayor cantidad de líquidos (incluyendo leche materna) de lo acostumbrado?	5. Menos de lo acostumbrado 6. Igual a lo acostumbrado 7. Más de lo acostumbrado 8. No le dio líquidos 10. No sabe	
43.	¿Cuando estuvo *[NOMBRE DEL NIÑO]* con diarrea, le dio menos, igual o mayor cantidad de comida/alimentos de lo acostumbrado?	5. Menos de lo acostumbrado 6. Igual a lo acostumbrado 7. Más de lo acostumbrado 8. No le dio comida/alimentos 10. No sabe	
44.	¿Cuando *[NOMBRE DEL NIÑO]* estaba recuperándose de la diarrea (durante la semana después de estar con diarrea), le dio menos, igual o mayor cantidad de comida de lo acostumbrado?	5. Menos de lo acostumbrado 6. Igual a lo acostumbrado 7. Mas de lo acostumbrado 8. No le dio pecho/comida/alimentos 9. No sabe	

MODULO 4D: INFECCIÓNES RESPIRATORIAS AGUDAS

No.	Preguntas	Codificación	Saltos
45.	¿Ha tenido *[NOMBRE DEL NIÑO]* una enfermedad con tos durante las ultimas dos semanas?	4. Sí 5. No ----------→ 6. No sabe ----------→	 **#56** **#56**
46.	Cuando *[NOMBRE DEL NIÑO]* estuvo con tos, ¿también tuvo dificultad para respirar o estuvo respirando más rápidamente de lo normal?	4. Sí 5. No ----------→ 6. No sabe ----------→	 **#56** **#56**
47.	Cuando *[NOMBRE DEL NIÑO]* estuvo con la tos o tos con respiración rápida, ¿buscó ayuda o el tratamiento?	1. Sí 2. No ----------→	 **#53**
48.	¿Donde acudió primero para consejos o tratamiento para la tos o tos con respiración rápida de *[NOMBRE DEL NIÑO]*?	ENTIDAD MEDICA 01 Hospital 02 Centro de salud 03 Puesto de salud 04 Centro curativo de un ONG 05 Clínica particular 06 Promotor/guardián de salud 07 Otro tipo de servicio medico _____ OTRO LUGAR 08 Curandero 09 Tienda 10 Farmacia 11 Distribuidora comunal 12 Pariente/amigo 88 Otro _____	

No.	Preguntas	Codificación	Saltos
49.	*Vea las respuestas de pregunta #48.* Si 01, 02, 03, 04: Escribir nombre de entidad _____		
50.	*¿A los cuántos días de la aparición de la tos o tos con respiración rápida buscó ayuda?*	4. La misma día 5. El día siguiente 6. Dos días 7. Tres o mas días	
51.	Cuando *[NOMBRE DEL NIÑO]* estuvo con la tos o tos con respiración rápida, *¿buscó ayuda o el tratamiento en algún otro lugar?*	1. Sí 2. No ----------→	**#53**
52.	*¿A cual otro lugar fue para ayuda o tratamiento?*	01 Hospital 02 Centro de salud 03 Puesto de salud 04 Centro curativo de un ONG 05 Clínica particular 06 Promotor/guardián de salud 07 Otro tipo de servicio medico 08 Curandero 09 Tienda 10 Farmacia 11 Distribuidora comunal 12 Pariente/amigo 88 Otro _____	
53.	*¿Cuales remedios/medicinas le dio a* [NOMBRE DEL NIÑO]*?*	(*Puede marcar varias opciones*) e. Ningún remedio f. Aspirina g. Panadol h. Antibiótico x. Otro _____ z. No sabe *(preguntar si tiene el frasco)*	
54.	*¿Cuando* [NOMBRE DEL NIÑO] *estuvo con tos y respiración rápida, le dio menos, igual o mayor cantidad de líquidos (incluyendo la leche materna) de lo acostumbrado?*	5. Menos de lo acostumbrado 6. Igual a lo acostumbrado 7. Más de lo acostumbrado 8. No le dio líquidos 11. No sabe	
55.	*¿Cuando estuvo* [NOMBRE DEL NIÑO] *con tos y respiración rápida, le dio menos, igual o mayor cantidad de comida/alimentos de lo acostumbrado?*	5. Menos de lo acostumbrado 6. Igual a lo acostumbrado 7. Más de lo acostumbrado 8. No le dio comida/alimentos 11. No sabe	

MODULO 6: ESPACIMIENTO DE EMBARAZOS

Diga: Ahora solamente nos falta pocas preguntas. Algunas de las preguntas son personales y de temas sensibles. Le hago acuerdo que no hay problema si usted no desea contestar cualquier pregunta.

No.	Preguntas	Codificación	Saltos
56.	**¿Cuantos niños menores de cinco años viven en esta casa?**	_____ niños menores de cinco	
57.	**¿Cuantos de estos niños son suyos propios?**	_____ niños biológicos	
58.	**¿Puede decirme el sexo y la fecha de nacimiento de sus dos hijos más chiquitos?**	**Niño #1 (hijo menor)** nombre _____ 1 Masculino____ 2 Femenino ____ Fecha de nacimiento (día/mes/año) ____/____/____ Edad en meses _____ **Niño #2** nombre _____ 1 Masculino____ 2 Femenino ____ Fecha de nacimiento (día/mes/año) ____/____/____ Edad en meses _____	
59.	Actualmente, ¿está embarazada?	1. Sí ----------→ 2. No 9. No sabe/no esta segura	**#63**
60.	¿Quiere tener otro niño?	3. Sí ---------- → **#63** 4. No ---------- → **#62** 9. No sabe ----------→ **#62**	
61.	¿Dentro de cuanto tiempo piensa tener otro hijo?	3. Dentro de los siguientes dos años 4. Mas de dos años 9. No esta segura	

No.	Preguntas	Codificación	Saltos
62.	Actualmente, ¿que hace usted para espaciar sus embarazos (no quedarse embarazada) (que hace usted o su esposo para protegerse contra el embarazo)?	(*Marcar una opción solamente – el método más usado.)* 01 Ningún método 02 Norplant/implantes bajo de la piel 03 Inyección/DepoProvera 04 Píldoras/pastillas anticonceptivas 05 T de Cobre/Dispositivo Intrauterino (DIU) 06 Diafragma 07 Condón 08 Espuma/gel/espermicida/óvulo/crema/ tableta 09 Esterilización quirúrgica femenina 10 Esterilización quirúrgica masculina/ Vasectomía 11 Método de la amenorrea de la lactancia (MELA) 12 Ritmo/calendario/moco cervical/ temperatura basal/collar 13 Abstinencia 14 Coito interrumpido 96 Otro	
63.	Me gustaría preguntar sobre los recursos disponibles en la comunidad para espacimiento de embarazos. Usted sabe donde puede conseguir un método para espaciar los embarazos (para no quedarse embarazada)?	(*Puede marcar varias opciones*) m. Hospital n. Centro de Salud o. Centro curativo/clínica de un ONG p. Puesto de salud q. Clínica de planificación familiar r. Guardián/promotor de salud s. Farmacia t. Otra entidad medica/clínica _____ u. Tienda v. Iglesia w. Amigo/pariente xi. Otro _____ aa. No sabe	

MODULO 7: CONOCIMIENTO SOBRE HIV/SIDA

No.	Preguntas	Codificación	Saltos
64.	¿Ha escuchado de una enfermedad que se llama "SIDA"?	3. Sí 4. No ---------- →	**#67**
65.	¿Es posible protegerse del SIDA?	3. Sí 4. No ---------- →	**#67**

No.	Preguntas	Codificación	Saltos
66.	¿Cómo cree que se proteja contra el SIDA? **Diga: Algo mas para protegerse contra SIDA?**	(*Puede marcar varias opciones*) o. No teniendo sexo p. Usando preservativos/condones q. Teniendo sexo con una sola persona/ ser fiel a una sola persona r. Limitar numero de personas con quien tiene relaciones sexuales s. No tener sexo con prostitutas t. No tener sexo con personas quienes mantienen muchas relaciones sexuales u. No tener sexo con personas quienes mantienen relaciones sexuales con personas del mismo genero (sexo homosexual) v. No tener sexo con personas quienes inyectan drogas w. No tener transfusiones de sangre x. No recibir inyecciones y. No besar z. No contacto con mosquitos/zancudos aa. Buscar protección de los curanderos bb. No compartir equipo de rasurar w. Otro _____ x. Otro _____ z. No sabe	

OTRO: CAPACITACION PREVIA EN SALUD

No.	Preguntas	Codificación	Saltos
67.	¿Ha recibido charlas o pláticas de salud en los últimos tres meses?	3. Sí 4. No	

ANTROPOMETRÍA

No.	Preguntas	Codificación	Saltos
68.	ENTREVISTADOR: PESA AL NIÑO, Y MARCAR EL PESO DEL NIÑO AQUÍ	Peso: _____.___ libras (**Anotar con fracciones de 0.25 libras**)	
69.	ENTREVISTADOR: VERIFICAR SI HAY EDEMA (HINCHAZÓN) EN AMBOS PIES.	4. Sí, hay edema en los dos pies 5. No, no hay edema en los dos pies 6. No sabe	

REVISAR EL CUESTIONARIO

Agradezca la colaboración!

Comentarios:

_____

Firma del Supervisor: _____

Annex 2
Indicators for Baseline

Indicador Ingles	Indicador Español	Numerador	Denominador	Cuestionario
% of mothers of children 0-11m who had at least one prenatal visit (card) with a trained health professional prior to the birth of her youngest child less than 12 months of age Measure with and without card (e.g., mother's report and verified with card)	Porcentaje de madres quienes tuvo por lo menos una visita prenatal (según carnet) con un profesional calificado antes del nacimiento de su hijo menor con edad menor de 12 meses	# mothers with at least one prenatal visit with a qualified health professional	# mothers interviewed with children 0-11 months old	0-11 months
% of children age 0-11 months whose births were attended by skilled health professional	Porcentaje de niños 0-11 meses quienes partos fueron atendidos por un profesional calificado	# mothers who gave birth in an institution or with a doctor or with a nurse	# mothers interviewed with children 0-11 months old	0-11 months
% of children age 0-23 months who are underweight	Porcentaje de niños 0-23 meses con peso bajo	# children with low weight, very low weight	# children weighed	0-11 months 12-23 months
% of children age 0-5 months who were exclusively breastfed during the last 24 hours	Porcentaje de niños 0-5 meses con lactancia maternal exclusiva dentro de las ultimas 24 horas	# children exclusively breast fed	# niños 0-5 months	0-11 months
% of mothers of children 0-11 months who received a Vit A dose during the first two months after delivery	Porcentaje de madres con niños 0-11 meses quienes han recibido una dosis de Vitamina A durante los primeros 2 meses después del parto	# mothers with children 0-11 months old who received vitamin A during the first 2 months after giving birth	# interviewed mothers	0-11 months
% of mothers of children 0-23 months with cough and fast breathing who seek care from a qualified health worker	Porcentaje de las madres con niños 0-23 meses con tos y respiración rápida quienes buscan ayuda de un trabajador de salud calificado	# mothers who are seeking help from a qualified health professional	# interviewed mothers with children with coughing and rapid breathing	0-11 months 12-23 months
% of mothers of children 0-11 months who know at least two signs of childhood illness that indicate the need for treatment	Porcentaje de madres con niños 0-11 meses quienes saben por lo menos dos signos de peligro (niño necesita tratamiento) relacionados con enfermedad	#mothers who identify signs of danger correctly	# interviewed mothers	0-11 months
% of non-pregnant mothers who desire no more children in the next two years or are not sure, who are using a modern method of child spacing	Porcentaje de madres no-embarazadas quienes no desean niños dentro de los siguientes dos años (o quienes no están seguras de no querer) quienes utilizan un método moderno de espaciar niños	# motherswho answer no or who are not sure who is using modern methods	# mothers not currently pregnant	0-11 months 12-23 months
% of mothers of children 12-23 months who report at least one place where she can obtain a method of child spacing	Porcentaje de madres con niños 12-23 meses quienes reportan conocimiento de por lo menos un lugar donde puede obtener un método para espaciar niños	#mothers who know of a place to get help for birth control	# mothers inerviewed	12-23 months

Indicador Ingles	Indicador Español	Numerador	Denominador	Cuestionario
% of children 13-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before they are 13 months of age (NOTE: Measles given at 12m in Guatemala.)	Porcentaje de niños 13-23 meses quienes están con esquema de vacunación completa (contra 5 enfermedades prevenibles con vacuna) antes de cumplir los 13 meses	# children 13-23 months old with a complete immunization schedule	# children 13-23 months old	12-23 months
% of mothers of children 0-11 months who received at least two tetanus toxoid injections before the birth of her youngest child	Porcentaje de madres con niños 0-11 meses quienes recibieron por lo menos dos inyecciones de antes de TT que nazca el hijo menor	# mothers interviewed with two vaccinations of TT	# interviewed mothers	0-11 months
% of children aged 0-23 months with diarrhea who are given the same amount or more liquids during the illness	Porcentaje de niños 0-23 meses con diarrea quienes reciben igual cantidad de líquidos o más líquidos durante la enfermedad	# children with diarrhea who receive the same quantity of liquids or more liquids during the actual illness	# children with diarrhea	0-11 months 12-23 months
% of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and-or recommended home fluids (RHF)	Porcentaje de niños 0-23 meses con diarrea durante los ultimas dos semanas quienes recibieron sales de rehidratación y/o líquidos caseros recomendados por XX	# children with diarrhea for the last two weeks who received SRO or RHF	# children with diarrhea for the last two weeks	0-11 months 12-23 months

Note: two questionnaires (one for 0-11 month olds and one for 12-23 months olds; sick child questions in both) will be used in order to assure an adequate sample size)

Annex 4
Agenda de la Capacitación

Primer Día **Jueves, 12 de diciembre 2002** **Equipe de Coordinación, Supervisores**	
Bienvenido (Dr. Mario Valdez)	10 minutos
Bienvenido (Consultante)	10 minutos
Repaso de la Agenda	5 minutos
Reglas, Compromisos para la capacitación	10 minutos
Introducción de los participantes	15 minutos
Sumario del proyecto FUMESDER/Ministerio de Salud (Dr. Valdez)	15 minutos
Que es una encuesta CPC y terminología clave	20 minutos
Propósito y rol de un encuestador en una entrevista CPC	20 minutos
Repaso del Cronograma de Sobre vivencia Infantil desde la Perspectiva de Monitoreo e Evaluación y Determinando Cuales Cambios son Medibles en una Encuesta CPC Indicadores del Proyecto	90 minutos
Refacción/Descanso	20 minutos
Que es la Encuesta CPC 2000: RapidCATCH y 15 Módulos	30 minutos
Perfeccionando el Cuestionario FUMESDER/Ministerio de Salud - Pistas para Mejorar el Cuestionario - Léxico Cultural - Calendario de Eventos - Dando Validez al Cuestionario - Revisó y Comentario sobre Preguntas	120 minutos
Almuerzo	60 minutos
Continuar Perfeccionando Cuestionario FUMESDER/Ministerio de Salud	240 minutos
Cena y Descanso	90 minutos
Lo Básico de Muestreo (con Equipo Coordinador y Logístico)	60 minutos
Seleccionando Comunidades dentro de Cada Área de Supervisión	30 minutos
Traducción del Cuestionario (traductoras)	

Segundo Dia **Viernes, 13 de Diciembre 2002** **Supervisores, Encuestadores**	
Bienvenido (Dr. Mario Valdez)	10 minutos
Bienvenido (Consultora)	10 minutos
Reglas, Compromiso, “Estacionamiento” y Presentaciones	15 minutos
Resumen del Proyecto Sobrevivencia Infantil FUMESDER/Ministerio de Salud	20 minutos
Que es una Encuesta CPC y Términos Claves	10 minutos
Revisión del Cuestionario (trabajo en grupo, guiado por supervisores)	40 minutos
Buenas Técnicas para Hacer una Encuesta	45 minutos
Refacción	15 minutos
Componentes y Detalle del Cuestionario - Consentimiento - Seleccionando Casas y Entrevistadas - Formulario para Registrar Encuestas no Encontradas - Como Utilizar Calendario de Eventos - Antrometria Buenas Técnicas Identificación de Malnutrición (edema) Practica	120 minutos

Familiarización con Carnets	
Almuerzo	60 minutos
Papeles de Supervisores y Encuestadores	30 minutos
Técnicas para Supervisores	15 minutos
Habilidades en Supervisión	20 minutos
Practicar Cuestionario (en grupos según idioma/región)	240 minutos
Cena y Descanso	90 minutos
Terminar croquis y muestreo (equipo coordinadora y logística)	120 minutos
Fotocopiar cuestionarios para censo piloto	60 minutos
Traducción de los cuestionarios (traductoras)	

Día 3 Sábado, 14 Diciembre de 2002 Supervisores, Encuestadoras	
Dialogo sobre Dudas: Cuestionario, Técnicas para Entrevistar, Selección de Casas, Selección de la Entrevistada, Traducción	30 minutos
Repasar Utilización de Formularios del Ministerio de Salud (peso/talla, vacunación, control del embarazo)	30 minutos
Practicar Individualmente Como Pesar Niños (trabajo en grupos, guiado por supervisores)	180 minutos
Finalizar traducción del consentimiento (grupo Chuj)	30 minutos
Almuerzo	60 minutos
Practicar Entrevistas (trabajo en grupos, guiado por supervisores)	40 minutos
Cena/Convivio Navideño	pm
Terminar croquis y muestreo (equipo coordinadora y logística)	120 minutos
Traducción de los cuestionarios (traductoras)	

Día 4 Domingo, 15 Diciembre de 2002 Supervisoras, Encuestadoras	
Prueba Piloto (Encuestadoras y Supervisoras)	AM
Selección de Comunidades y Logística (Equipo Coordinador y Logística)	AM/PM
Revisión de Cuestionarios y Preparación de Comentario (consultora)	
Compartir Resultados sobre Desempeño y Uso del Cuestionario (consultora y Supervisoras)	PM
Ajustes Finales al Cuestionario (incluye traducción Qanjobol)	PM

Día 9 Jueves, 19 de Diciembre de 2002 Equipo Coordinador, Logístico, Entrada de Datos	
Limpieza de Datos	15 Minutos
Tabulación de Datos LQAS	30 Minutos
Ejercicio Practico: Llenando la Matriz de Resultados LQAS	60 minutos
Cosas Pendientes y Próximos Pasos	10 Minutos

Anexo 5Formulario para Registrar Encuestados No Encontrados

Formulario para Registrar Encuestados No Encontrados
CURAMERICAS/FUMESDER

Encuestadora: _____ Supervisor:_____

Área de Supervisión: _____ Fecha: ____ / ____ / ____

Pregunta	(Hacer marcas aquí) 卌	Totales
¿Cuántas casas visitó donde no habían niños menores de 24 meses?		
¿Cuántas casas visitó donde no habían ni una persona viviendo en la casa?		
¿Cuántas casas visitó donde la madre rehusó participar en la encuesta?		
¿Cuántas casas visitó donde hubo una madre con niño menor de 24 meses viviendo en la casa, pero no podía entrevistarle porqué no estaba (aún regresando a la casa después de varias horas)?		

Annex 6 -- *KPC INTERVIEW EVALUATION FORM*

Supervisor:_____ Interviewer: _____
Community: _____ Date: ____/____/____

[Protocol: Observe and Evaluate, at the very least, two interviews done by each interviewer in your team each day. Use this form as you observe them. While you are observing, do not talk with him or her: Fill out this form only. When s/he is finished with the interview, go over this form together in private. Go over each point below quickly, pointing out both their strong points and the areas of their performance where they need to improve. Remember: The purpose of this form is to *improve* the interviewers' performance and to *document* the quality of the interviews.]

		Yes	**No**
1.	Was the **household selected properly**?		
	Was the **correct respondent** selected properly?		
3.	***If the intended respondent was not at home***, did the interviewer follow the **proper protocol** (e.g., finding him or her if less than __ minutes away)		
4.	Was the **mother and person who came to the door greeted** in a friendly manner?		
5.	Was the **introductory statement / consent form read properly and signed**?		
6.	Was the **information at the top of the questionnaire** filled in properly?		
7.	(If the **age in months was calculated from the DOB**, was that done properly?)		
8.	If the **events calendar** should have been used, was that done properly?		
9.	Was the **writing on the form legible**?		
10.	Did the interviewer **speak loudly enough and clearly**?		
11	Did the interviewer **maintain appropriate eye contact** with the mother?		
12.	Were the **mother's responses reacted to in a neutral fashion** (not negatively or too positively)?		
13.	Was only one response filled in for **questions that required only one response**?		
14.	Did s/he say "**anything else?"** properly for the multiple responses questions?		
15.	Were **questions read exactly as written (including reading responses when Indicated to do so)**?		
16.	Were questions **repeated exactly as worded when the mother gave a response that was not very clear**?		
17.	Were **probes** used when the response still was not very clear?		
18.	Did the interviewer **avoid guiding** the mother to a particular response?		
19.	Did the interviewer **follow skip patterns properly**?		
20.	Was the **child weighed/measured properly and the results recorded properly**?		
21.	In general, was the **interview conducted properly / questionnaire filled in properly**?		
	1 2 3 4 5 **6** 7 8 9 10 11		
	No **Yes**		
22.	Did the interviewer **thank the mother** for her time and involvement?		

Scoring..... Yes =___ Used (Yes+No) =_____ Score=_____%

Anexo 8
Listado de Participantes
Capacitación para Supervisoras, Equipo CPC, Ministerio de Salud
Jueves, Diciembre 12 de 2002 - Día 1

No.	Nombre y Apellidos	Cargo	Institución
1	Inés A. García Pedro	Supervisora/Educadora	FUMESDER
2	Eulalia Pedro José		FUMESDER
3	Maida Calderón R.	Facilitadora Institucional	FUMESDER
4	Lucia Diego Esteban	Auxiliar de Enfermería	Puesto de Salud Coatan
5	Lorenza Alicia Esobar	Secretaria	FUMESDER
6	Elmer Hernandez Hernández	Auxiliar de Enfermería	Puesto de Salud Jucup.
7	Ingrid Yaneth Gómez R.	Auxiliar de Enfermería	
8	Maria Sebastián Antonio	Educadora	Puesto de Salud Santo Domingo
9	Mary Ángela Selkin	T.O. II	Centro de Salud San Rafael
10	Petrona Mateo Andres	Supervisora	FUMESDER
11	Alma Esperanza Domínguez	Auxiliar de Enfermería	FUMESDER
12	Sara Patricia Camposeco	Organización y Participación Comunitaria	FUMESDER
13	Catarina Francisco Miguel	Supervisora	FUMESDER
14	Mario Rodrigo Valdez	Director/Coordinador	FUMESDER

ANEXO 8, Continuación
Capacitación para Supervisoras, Equipo CPC, Encuestadoras
Viernes, 13 Diciembre de 2002 – Día 2

No.	Nombre y Apellidos	Cargo	Institución
1	Inés A. García Pedro	Supervisora/Educadora	FUMESDER
2	Eulalia Juana Pedro José		FUMESDER
3	Maida Calderón Rodas	Facilitadora Institucional	FUMESDER
4	Lucia Diego Esteban	Auxiliar de Enfermería	Puesto de Salud Coatan
5	Lorenza Alicia Esobar Díaz	Secretaria	FUMESDER
6	Elmer Hernández Hernández	Auxiliar de Enfermería	Puesto de Salud Jucup.
7	Ingrid Yaneth Gomez Reyes.	Auxiliar de Enfermería	
8	Maria Sebastián Antonio	Educadora	Puesto de Salud Santo Domingo
9	Mary Angela Selkin	T.O. II	Centro de Salud San Rafael
10	Petrona Mateo Andres	Supervisora	FUMESDER
11	Alma Esperanza Domínguez	Auxiliar de Enfermería	FUMESDER
12	Sara Patricia Camposeco Silvestre	Organización y Participación Comunitaria	FUMESDER
13	Catarina Francisco Miguel	Supervisora	FUMESDER
14	Mario Valdez	Director	FUMESDER
15	Angelica Pascual	Encuestadora	FUMESDER
16	Maria Sebastián Antonio	Encuestadora /Educadora Comunitaria	FUMESDER
17	Maria Bautista Hernández	Encuestadora /Perito Administración	FUMESDER
18	Micaela Miguel Bartola	Encuestadora /Estudiante	FUMESDER
19	Dilia Patricia Andrade Domínguez	Encuestadora Ama de Casa	FUMESDER
20	Angelica Maria Andrade Domínguez	Encuestadora/Estudiante	FUMESDER
21	Petrona Grisel Andres Po.	Encuestadora/Estudiante	FUMESDER
22	Eva Pedro Lopez	Encuestadora/Estudiante	FUMESDER
23	Maria Tomas Ignacio	Encuestadora	FUMESDER
24	Magdalena Tomas Tomas	Encuestadora/Estudiante	FUMESDER
25	Maria Doricelda Domingo	Encuestadora/Maestra	FUMESDER
26	Apolonia Tomas Martin Martin	Encuestadora/MEPB	FUMESDER
27	Magdalena Alicia Martin A.	Encuestadora/Estudiante	FUMESDER
28	Maria Mateo Martin	Encuestadora/Secretaria Oficina	FUMESDER
29	Fabiana Martin Bartolomé	Encuestadora/Estudiante	FUMESDER
30	Catarina Mateo Andres	Encuestadora	FUMESDER
31	Maria Elvira Montejo Sanchez	Encuestadora	FUMESDER
32	Brenda Patricia Rivas Francisco	Encuestadora	FUMESDER
33	José Domingo Lopez	Auxiliar de Enfermería	FUMESDER
34	Maria Alicia Gomez	Encuestadora	FUMESDER
35	Micaela Pedro Francisco	Encuestadora/Estudiante	FUMESDER
36	Ofelia Pedro Francisco	Encuestadora/Estudiante	FUMESDER
37	Silvia Lorena Manuel Gomez	Encuestadora/Estudiante	FUMESDER

Anexo 8, Continuación
Capacitacion para Supervisoras, Equipo CPC Encuestadoras
Sábado, 14 Diciembre de 2002 – Día 3

No.	Nombre y Apellidos	Cargo	Institución
1	Inés Apolonia García Pedro	Educadora	FUMESDER
2	Eulalia Juana Pedro José		FUMESDER
3	Maida Calderón Rodas	Facilitadora Institucional	FUMESDER
4	Lucia Diego Esteban	Auxiliar de Enfermería	Puesto de Salud Coatan
5	Lorenza Alicia Esobar Díaz	Secretaria	FUMESDER
7	Ingrid Yaneth Gomez Reyes.	Auxiliar de Enfermería	
8	Maria Sebastián Antonio	Encuestadora/Educadora Comunitaria	Puesto de Salud Santo Domingo
9	Mary Angela Selkin	T.O. II	Centro de Salud San Rafael
10	Petrona Mateo Andres	Supervisora	FUMESDER
11	Alma Esperanza Domínguez	Auxiliar de Enfermería	FUMESDER
12	Sara Patricia Camposeco Silvestre	Organización y Participación Comunitaria	FUMESDER
13	Catarina Francisco Miguel	Supervisora	FUMESDER
14	Mario Valdez	Director	FUMESDER
15	Angelica Pascual Pascual	Encuestadora	FUMESDER
16	Maria Bautista Hernández	Encuestadora /Perito Administración	FUMESDER
17	Micaela Miguel Bartola	Encuestadora /Estudiante	FUMESDER
18	Dilia Patricia Andrade Domínguez	Encuestadora Ama de Casa	FUMESDER
19	Angelica Maria Andrade Domínguez	Encuestadora/Estudiante	FUMESDER
20	Petrona Grisel Andres Pascual	Encuestadora/Estudiante	FUMESDER
21	Eva Pedro Lopez	Encuestadora/Estudiante	FUMESDER
22	Maria Tomas Ignacio	Encuestadora	FUMESDER
23	Magdalena Tomas Tomas	Encuestadora/Estudiante	FUMESDER
24	Maria Doricelda Domingo Sebastian	Encuestadora/Maestra	FUMESDER
25	Apolonia Tomas Martin Martin	Encuestadora/MEPB	FUMESDER
26	Magdalena Alicia Martin Antonio	Encuestadora/Estudiante	FUMESDER
27	Maria Mateo Martin	Encuestadora/Secretaria Oficina	FUMESDER
28	Fabiana Martin Bartolomé	Encuestadora/Estudiante	FUMESDER
29	Catarina Mateo Andres	Encuestadora	FUMESDER
30	Maria Elvira Montejo Sanchez	Encuestadora	FUMESDER
31	Brenda Patricia Rivas Francisco	Encuestadora	FUMESDER
32	Maria Alicia Gomez	Encuestadora	FUMESDER
33	Micaela Pedro Francisco	Encuestadora/Estudiante	FUMESDER
34	Ofelia Pedro Francisco	Encuestadora/Estudiante	FUMESDER
35	Silvia Lorena Manuel Gomez	Encuestadora/Estudiante	FUMESDER
36	Julio Roberto Gonzalez	Informatica	FUMESDER

Anexo 9, continuación

Equipo Logístico y Administrativo

1	Julio Roberto González	Enumeración de Croquis, muestreo, logística, entrada de datos	
2	Martin	Piloto	
3	Lorenza Alicia Esobar Díaz	Traducción Qanjobol-Acateca, fotocopias	
4	Sara Patricia	Enumeración de Croquis,	
5	Inez	Traducción Español-Qanjobol	
6	Floricia	Logística, entrada de datos	
7	Maida	Enumeración de Croquis	

Anexo 9
Costo de la Capacitación y Ejecución de la Línea Base

PRESUPUESTO:
Consultora 19 días $250/día $4750
Dos vehículos 5 días $100/día $1000
Dos pilotos 5 días Q100 $125
12 encuestadoras 8 días n/a (FCs)
6 supervisoras 9 días $125 $900
Comida/hotel 24 personas 12 días Q105/DIA $3780
(12 encuestadoras, 6 supervisoras, 1 AD, consultora, HIS especialista, Coordinador del Programa, Coordinador de Educación, Administrador)
Fotocopias 7860 copias $.05 c/u $393
Personal entrada datos 2 personas 4 días Q200/día $200
TOTAL: $11,148

Anexo 10

Calendario de Eventos

AREA CHUJ, HUEHUETENANGO, GUATEMALA

Diciembre 2000 – Diciembre 2002

Edad Meses	Eventos	Mes	Año
1	Día de la Santos, Fiesta de Santa Catarina	Noviembre	2002
2	Día de la Raza, Fiesta de San Francisco de Asis, Día del Niño, vacaciones escolares	Octubre	2002
3	15 Septiembre	Septiembre	2002
4	*Día de Santo Domingo, Día de la Asunción de Maria*	*Agosto*	*2002*
5	Fiesta del Carmen, Época de lluvia	Julio	2002
6	*Día de San Antonio, Día de San Juan Bautista, siembra de trigo*	*Junio*	*2002*
7	*Día de la Madre*	Mayo	2002
8	Semana Santa, Día de San Marcos	Abril	2002
9	Fiesta de San José Pueblo Nuevo, Día de San Gabriel	Marzo	2002
10	Fiesta de Candelaria, Época de calor y lluvia "Febrero Loco", cosecha de trigo	Febrero	2002
11	Ano Nuevo, Fiesta de Esquipulas, Fiesta de S.S. Coatan, inicio de clases escolares	Enero	2002
12	*Navidad, Las Posaditas, Fiesta de Concepción de Maria, Fiesta de Guadalupe*	*Diciembre*	*2001*
13	Día de la Santos, Fiesta de Santa Catarina	Noviembre	2001
14	Día de la Raza, Fiesta de San Francisco de Asís, Día del Niño, vacaciones escolares	Octubre	2001
15	15 Septiembre	Septiembre	2001
16	*Día de Santo Domingo, Día de la Asunción de Maria*	Agosto	2001
17	Fiesta del Carmen, Época de lluvia	Julio	2001
18	Día de San Antonio, Día de San Juan Bautista, siembra de trigo	Junio	2001
19	Día de la Madre	Mayo	2001
20	*Semana Santa,*	*Abril*	*2001*
21	Fiesta de San José P.N.	Marzo	2001
22	Fiesta de Candelaria, Época de calor y lluvia "Febrero Loco", cosecha de trigo	Febrero	2001
23	Ano Nuevo, Fiesta de Esquipulas, Fiesta de S.S. Coatan, inicio de clases escolares	Enero	2001
24	*Navidad, Las Posaditas, Fiesta de Concepción de Maria, Fiesta de Guadalupe*	*Diciembre*	*2000*

DESPUES

ANTES

ENCUESTADOR:

- **Preguntar a la madre, "Nació (NOMBRE DEL NIÑO/A) antes XX utilizando el evento más cercano a la edad estimada del niño/a.**
- **Si la madre dice "si" o "antes", vaya preguntando sobre eventos en las filas siguientes (hacia abajo/eventos menos recientes) del calendario de eventos.**

- **Si la madre dice “no” o “después”, vaya preguntando sobre eventos en las filas anteriores (hacia arriba / eventos mas recientes) del calendario de eventos**
- **Llevar el calendario de eventos a cada entrevista!**

Anexo 11
Bitácora

Ejecución de la Línea Base

Lunes, 16 de Diciembre de 2002
Logística y distribución de personas a comunidades Encuestas en comunidades: Terminar traducción Español-Acateco 0-11 y 12-23 meses (previamente hecho en Qanjobol –pocas diferencias entre estos idiomas) Selección de comunidades y enumeración de casas en croquis (muestreo) para 17/12/02 Matriz de Resultados LQAS Fotocopiar Revisión de cuestionarios por supervisoras Equipo CPC reunión con Dr. Valdez para revisar logística para 17/12/02 Hora de empezar: 07:00 horas Hora de terminar: 23:15 horas

Martes, 17 de Diciembre 2002
Logística y distribución de personas a comunidades Selección de comunidades y enumeración de casas en croquis (muestreo) para 18/12/02 Recibir encuestas terminadas y revisadas de 16/12/02 Revisión de asuntos relacionados con encuestas con supervisoras Hora de empezar: 06:00 horas Hora de terminar: 22:00 horas

Miércoles, 18 de Diciembre 2002
Logística y distribución de personas a comunidades Recibir encuestas terminadas y revisadas de 17/12/02 Hora de empezar: 06:00 horas Hora de terminar: 23:00 horas

Annex 12
CALENDARIO DE EVENTOS
AREA ACATECO, HUEHUETENANGO, GUATEMALA
Diciembre 2000 – Diciembre 2002

Edad Meses	Eventos	Mes	Año
1	Día de la Santos, Fiesta de Santa Catarina	Noviembre	2002
2	Día de la Raza, Fiesta de San Francisco de Asís, Día del Niño, vacaciones escolares	Octubre	2002
3	15 Septiembre, Día de San Miguel	Septiembre	2002
4	*Día de Santo Domingo, Día de la Asunción de Maria*	*Agosto*	*2002*
5	Día de Santiago, Fiesta del Carmen, Época de lluvia	Julio	2002
6	*Día de San Antonio, Día de San Juan Bautista, siembra de trigo*	*Junio*	*2002*
7	Día de la Madre	Mayo	2002
8	Semana Santa, Día de San Marcos	Abril	2002
9	Fiesta de San José Pueblo Nuevo, Día de San Gabriel	Marzo	2002
10	Fiesta de Candelaria, Época de calor y lluvia "Febrero Loco", cosecha de trigo, Santa Eulalia, Carnaval	Febrero	2002
11	Ano Nuevo, Fiesta de Esquipulas, Fiesta de S.S. Coatan, inicio de clases escolares	Enero	2002
12	*Navidad, Las Posaditas, Fiesta de Concepción de Maria, Fiesta de Guadalupe*	*Diciembre*	*2001*
13	Día de la Santos, Fiesta de Santa Catarina	Noviembre	2001
14	Día de la Raza, Fiesta de San Francisco de Asís, Día del Niño, vacaciones escolares	Octubre	2001
15	15 Septiembre, Día de San Miguel	Septiembre	2001
16	*Día de Santo Domingo, Día de la Asunción de Maria*	Agosto	2001
17	Día de Santiago, Fiesta del Carmen, Época de lluvia	Julio	2001
18	Día de San Antonio, Día de San Juan Bautista, siembra de trigo	Junio	2001
19	Día de la Madre	Mayo	2001
20	*Semana Santa,*	*Abril*	*2001*
21	Fiesta de San José P.N.	Marzo	2001
22	Fiesta de Candelaria, Época de calor y lluvia "Febrero Loco", cosecha de trigo, Santa Eulalia, Carnaval	Febrero	2001
23	Ano Nuevo, Fiesta de Esquipulas, Fiesta de S.S. Coatan, inicio de clases escolares	Enero	2001
24	*Navidad, Las Posaditas, Fiesta de Concepción de Maria, Fiesta de Guadalupe*	*Diciembre*	*2000*

DESPUES

ANTES

ENCUESTADOR:
Preguntar a la madre, "Nació (NOMBRE DEL NIÑO/A) antes XX utilizando el evento más cercano a la edad estimada del niño/a.

Si la madre dice "si" o "antes", vaya preguntando sobre eventos en las filas siguientes (hacia abajo/eventos menos recientes) del calendario de eventos.

Si la madre dice “no” o “después”, vaya preguntando sobre eventos en las filas anteriores (hacia arriba/eventos mas recientes) del calendario de eventos

Llevar el calendario de eventos a cada entrevista!

ANNEX C: SUMMARY OF QUALITATIVE DATA COLLECTION AND HEALTH FACILITY ASSESSMENT

Summary of Focus Groups, Key Informant Interviews and Direct Observations

The Curamericas/Guatemala Health Educators, one fluent in Chuj, the other fluent in Akateko, conducted **focus groups** in five *Acateca* communities and three *Chuj* communities. The Health Educators were trained in focus group methodology by the CS Program Manager using training notes developed by Curamericas' Senior Program Specialist. Some of the information from the focus groups is supplemented with information from **key informant interviews, and observations from the program specialist's visits** to *Chuj* and *Acateca* villages in March 2003.

Perceived Community Needs

In the *Acateca* area, focus group participants in some communities mentioned lack of water, lack of food, lack of latrines, and lack of health posts as some of the most important needs. Participants in the *Chuj* area expressed concerns about poverty and illiteracy. Frequently mentioned illnesses of children included diarrhea and vomiting, respiratory infections, skin problems such as dermatitis and rashes, and "mal de ojo" (evil eye).

Access to Health Care

Some communities did not have local health posts or health centers, and people there have to travel two to four hours to get medical attention. Others said that there were health posts within an hour's walk. Referral and transport to a hospital was rare, but focus group participants knew of some instances of children being taken to the hospital. No one knew of any cases of laboring women being taken to the hospital. The participants attributed this failure to transport women with obstetric emergencies to the high cost of care. Also, many areas are not able to transport in the winter when the roads become impassable. People had fairly positive impressions of the health workers, except in the hospital at Huehuetenango, where someone had heard that health workers there are "in bad moods" when attending to patients.

Water & Hygiene

Many families store water in uncovered water containers (however at least one home was observed to have covered water containers during a recent field visit). Participants in two Acateca communities mentioned water shortages; one of those has conflicts over water. DECOPAZ, a Guatemalan government agency, is working on projects to increase availability of potable water in the project area. Participants in one Acateca community stated that they had learned about hygiene for preventing illness, and that they used some of what they had learned. In another Acateca community informants stated that they had learned something about hygiene but generally did not practice the behaviors. The other groups indicated that they had not received any information about hygiene or prevention of illness.

Breastfeeding and Nutrition of Infants

There seemed to be significant differences in the feeding practices between *Acateca* and *Chuj* areas, but its not clear whether this is a true difference, or reflects differences in the depth of information gathered by the less-experienced and less-skilled *Chuj* focus group leader. The impression from observations of *Chuj* and *Acateca* communities is that the *Chuj* are a bit more traditional (and consume less packaged food). Chuj women, according to key informants, and from the focus group data, tend to help and support each other more than Acateca women.

Chuj participants report initiation of breastfeeding after the birth "when the mother feels better" or soon after giving birth. In some cases, "if the mother does not have milk," breastfeeding is initiated a day after giving birth, and sugar water is given in the meantime. *Chuj* participants stated that nobody bottle feeds, unless a child is adopted. A key informant states that this is not true, the *Chuj* give a lot of supplemental bottle feeds, just as the *Acateca* do, but perhaps did not want to admit this to the health educator who conducted the focus groups. [34] Weaning happens at age two or three years, or when the mother is pregnant again. In contrast, in the Acateca area, participants stated that breastfeeding does not generally begin until day three. In the meantime newborns are fed sugar water, boiled water, and sweetened coffee, crackers dissolved in coffee, or other liquids or foods. Semisolid feedings are started somewhere between birth and six months, depending on the family. Neither group (*Acateca or Chuj)* reported feeding children extra food after illnesses, all reported that children rejected food when ill. (The KPC study found that 38% of all children 12-23m were encouraged to eat when they were not hungry, but no analysis were done by cultural group.) Actively feeding or coaxing children to eat is apparently not practiced by either group.

Children were given the same foods that adults eat; beans, tortillas, noodles, eggs – whatever was available, in both groups, but beans and tortillas dissolved in broth were the most frequently mentioned.

In most of the communities, no growth monitoring of children had been provided. Many received no regular health care except for vaccination campaigns. In the two communities where growth was being monitored, participants stated that children were weighed "to see how much they weigh". There was no mention of children being weighed in order to detect growth faltering. The children in both areas showed visible signs of stunting. (During the KPC survey, it was found that 2.8% of children 12-23m had bipedal edema, as well.)

Food insecurity was mentioned as a concern in two Acateca communities. Key informants state the food insecurity can be an issue for all the communities whenever there is drought or a poor harvest. On observation, cats and dogs kept as pets in an Acateca village appeared to be nearly starving (this may indicate that families have no scraps leftover to feed the animals, and children were visibly stunted.

Immunization and Vitamin A

All groups reported that the children had received vaccinations, though most participants were unclear about which immunizations had been given and what diseases

[34] It is reasonable to suspect that social desirability may be a factor in some of the focus group data, the Chuj participants especially seem to be telling the facilitator what they believe she wants to hear. For more information on social desirability see Bender, DE et al. "Tell me what you mean by *Sí:* perceptions of quality of prenatal care among immigrant Latina women. Qual Health Res. 2001 Nov: 11(6): 780-794.

would be prevented. Almost none had received vitamins, and some thought they had heard of vitamin A, which would "give strength" to children. Some confused vitamins with vaccines.

Diarrhea

Diarrhea was a frequently mentioned problem. Most focus group participants stated that they had not received any education on prevention. They believed it was correct and appropriate to offer more fluids, including breastmilk, boiled water, sugar water, juices, teas, and even sodas (as well as food) to children with diarrhea, but said that the children usually rejected the extra fluids and food because they did not feel well. Some would treat the sick child with boiled herbs; others would buy a remedy at a pharmacy, take the child to a health post (if available in their community) or seek assistance from a traditional healer or traditional birth attendant. Most felt that an infant or child needed to be taken to a health post or clinic if he or she refused to breastfeed or eat. Some said that they would treat diarrhea at home, but if there was no improvement after several days, they would take the child to the clinic. Others said that if the child was very weak, they would go to the clinic.

Acute Respiratory Infections

Participants also stated that infants and children would be taken to a health facility for treatment if they became so sick that they would not breastfeed or eat. A frequently mentioned home remedy for ARI was throat lozenges dissolved in water.

Perinatal Care and Child Spacing

Mothers did not generally report prenatal care or postpartum care. Facilitators were told that most births were not even attended by traditional birth attendants. No one mentioned receiving tetanus vaccinations, or any vaccinations for adults (only children). The most frequently mentioned problems of pregnancy were cramps, headache, and anemia. The most frequently mentioned problems of birth were malpositioned fetuses, causing long labors (up to a week long), and maternal hemorrhage. Some mothers make use of modern birth control methods, available at some of the health facilities. They prefer the injection (Depo Provera) method, because it is more private, and others do not have to know that someone is using a family planning method. One informant said that some of the women do not tell their husbands that they are getting family planning methods at the health center.

Contacts and Information Sources

Most groups complained of a lack of information and health education. They said that the only health promoters they ever see are the ones coming to vaccinate the children. One group mentioned that they had learned about hygiene from the health worker at the health post.

Conclusions

The data from the focus groups, key informant interviews, and observations supports the findings of the Health Facility Assessment and the KPC. The nutritional interventions seem very important. Even in the areas where food may at times be scarce,

overall nutritional status could improve significantly if parents learned and used better feeding practices (given the poor practices identified by the KPC and focus groups). The Positive Deviance / HEARTH component of the project, as well as the educational messages that will be delivered through the Care Groups, could have a big impact on nutritional status in these communities.

Focus group participants frequently mentioned a desire for – and lack of access to – health education on a number of health topics, including hygiene, immunization and nutrition. They would benefit from learning to recognize danger signs and appropriately seek help. The Care Group model will be well suited to meeting these families learning needs in a culturally and linguistically appropriate manner.

Health Facilities Assessment (HFA)

Introduction and Methods

An assessment of the health facilities in the project area (San Miguel Acatan, San Rafael la Independencia, and San Sebastian Coatan) was conducted in March 2003. We used the BASICS HFA methodology by John Murray and Serge Manoncourt.[35]

Dr. Mario Valdes, Curamericas (Guatemala) Child Survival Program Manager was trained in the use of HFA tools in February 2003 by Tom Davis, Senior Program Specialist. Dr. Valdes received technical assistance and support in planning the HFA training sessions from Mary DeCoster, Program Specialist.

The evaluators were trained on March 10th and 11th. The group consisted of six Curamericas (Guatemala) staff members, four other health care workers, and a community representative from San Miguel Acatan. The training relied heavily on participatory methods. Participants had ample opportunity to learn to use the forms and to record their observations during role plays simulating provider and patient interactions. Participants gave each other feedback on their observation, interviewing and data recording techniques.

Evaluation teams with three members each were formed and site visits were scheduled for the week of March 12th. Five of the ten intended sites had been recently closed due to lack of staff, so a total of five clinics and health posts were visited. Evaluators observed the case management of all sick children or infants between two months and four years of age. A total of 18 cases were observed, 18 parents interviewed, and five health care workers were observed and interviewed. These numbers are much lower than had been desired and anticipated, but project staff felt that the information obtained was useful and representative.

There were three parts to the evaluation – the evaluation team supervisor inspected the health care facility to check for availability of essential vaccines, medications and supplies, and interviewed the health care workers about their knowledge of danger signs that would require referral. The second team member observed case management procedures and the third team member conducted exit interviews with the parents to assess their understanding of the treatment plan.

Results

On March 24th and 25th Mary DeCoster, Program Specialist worked with the Project Director and two other members of the evaluation team, to compile data obtained during the site visits, then on March 27th the entire staff of Curamericas (Guatemala) worked together to rank the indicators in terms of importance, ease or difficulty of making changes, availability of resources, and time necessary to make changes. These four factors were used to prioritize which indicators should be addressed in the scope of our project. Staff developed a list of recommendations for possible solutions for the most important and changeable indicators. These recommendations will be used in planning for provision of supplies, training and ongoing supervision at all the health facilities in the project area.

- **Case Management Observation**

[35] For more information, see: http://www.basics.org/publications/pubs/hfa/hfa_toc.htm .

Only one of the health care workers observed has been trained in IMCI. This was the only worker who evaluated children for the three danger signs and weighed and measured the children. Most of the workers did not ask family members about the child's vaccination status. Antibiotics and medication for treating fever were appropriately prescribed in the majority of cases. Oral rehydration solution (ORS) was also appropriately prescribed but its use was not modeled due to unavailability of ORS in the centers and health posts.

- **Exit Interviews with Parent (or Child Care Provider)**

The majority of the families in the project area speak a Mayan dialect, usually *Akateko* or *Chuj*, as their first language, and some speak little or no Spanish. The health care workers are not all fluent in the native dialects and conduct the patient consultations in Spanish. The evaluators, who were fluent in the native dialects, noted that language barriers may have accounted in large part for the discrepancies between care providers instructions to parents and what parents were actually able to recall at the exit interview.

About fifty percent of parents in San Miguel and San Sebastian, and a hundred percent in San Rafael knew how to correctly administer the medications that had been prescribed for their children. Most knew at least two signs that the child would need immediate medical attention. In San Miguel 100% *did not know* when to return for follow-up, and in San Sebastian and San Rafael, 50% and 40%, respectively, knew when to return.

- **Interview with Health Care Work and Site Observation**

Problems of greatest concern to the health care workers included lack of regular training, insufficient personnel, problems with transportation of supplies, language barriers, lack of supervision, problems with referral and transport of patients (the nearest hospital is five hours away), and in one health post, the lack of electricity and a refrigerator for storing vaccines and medicines.

All health facilities had correct vaccination schedules posted; all workers knew at least three signs indicating a need to refer patients to the hospital. Staff had received an average of three supervisory visits and one training in the past 12 months (though some of the most remote sites had received no supervision and no training).

- **Ranking of Indicators**

Use of IMCI danger signs in evaluating children, and teaching the danger signs to families, were seen as the highest priorities by the group, in terms of high importance, ease of change, availability of resources, and time required.

Other high priority indicators were related to growth monitoring, counseling on breastfeeding, and teaching parents to properly measure and administer medication. Consistent use by health facility staff of the IMCI protocols chart, growth monitoring, and checking to see that vaccinations are up to date at each clinic visit were ranked highly, as well.

Indicators related to availability of stock (vaccines, medicines) and equipment, and human resources were seen as high priority indicators, but very problematic in terms of ease of change, resources, and time required. Given those restraints, the team did not give these indicators high priority. The child survival

project budget does include funds for addressing all of these issues, though, and so these problems will be addressed during the project.

- **Project staff recommendations for possible solutions**
  a. ***Evaluate danger signs***: Barriers are lack of training in IMCI. Recommendations are for training in IMCI, soon, and ongoing evaluation and supervision to assure that IMCI tools are consistently used.
  b. ***Teach danger signs to the parents or caregivers***: There are linguistic barriers, widespread illiteracy, and this kind of teaching is very time consuming. Ideas included developing cards with important terms in *Chuj* and *Akateko*. Most of this education will need to take place in the community setting, due to time constraints at the health facilities, but health care providers should reinforce these health education messages at all visits. During this child survival project, a medical phrase book will be created that will allow staff to look up Spanish phrases/questions and key messages used during the IMCI consult, and easily find the equivalent phrase in *Chuj* and *Akateko*. Staff will be taught how to use this phrase book, as well.
  c. ***Staff should use the IMCI charts, growth monitoring tools, and the vaccine charts consistently***. Recommendations were that staff should be trained in the use of these tools, and that regular supervision and evaluation be provided to reinforce their consistent use.
  d. ***Exclusive breastfeeding for children under 6 months, and delayed weaning should be encouraged by health workers***. Barriers include embarrassment about discussing breastfeeding with male providers, illiteracy, and language barriers. Recommendations: all workers should be trained in breastfeeding, and should provide breastfeeding information or reinforce breastfeeding message during visits with infants and toddlers under two years, and with all pregnant women, even if the parent is reluctant to discuss breastfeeding.

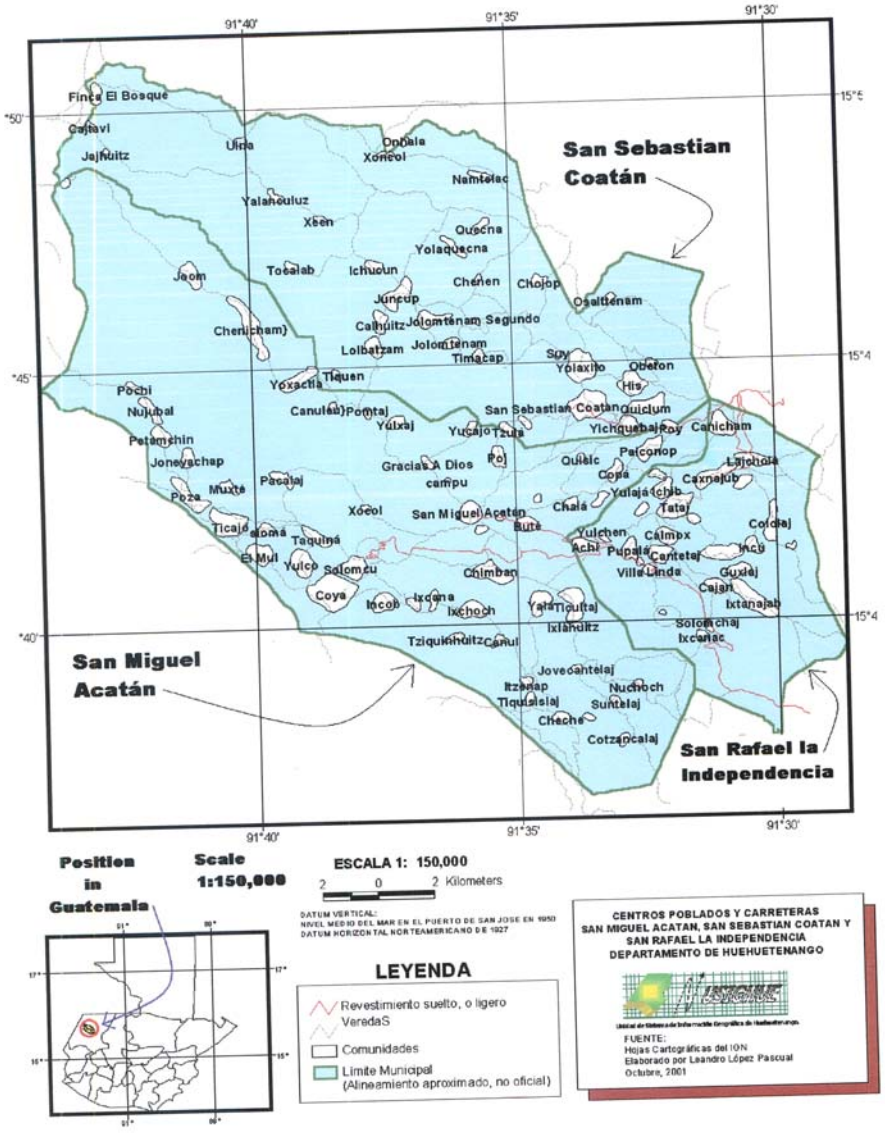
Conclusions

The health facility evaluation process provided useful information about the current quality of services and the availability of supplies and equipment in the project area, and increased staff understanding and ownership of project goals. Guatemalan project staff also found the activities very informative and educational, helping them to acquire a broader view of the project aims, the process of prioritizing activities, and the supportive and educational role of evaluation for health care workers. Staff expressed that some of their previous experiences with evaluation had not been so productive and practical, and all were pleased and surprised to see the depth of the data analysis, and how seriously the results were being taken into consideration in the planning process.

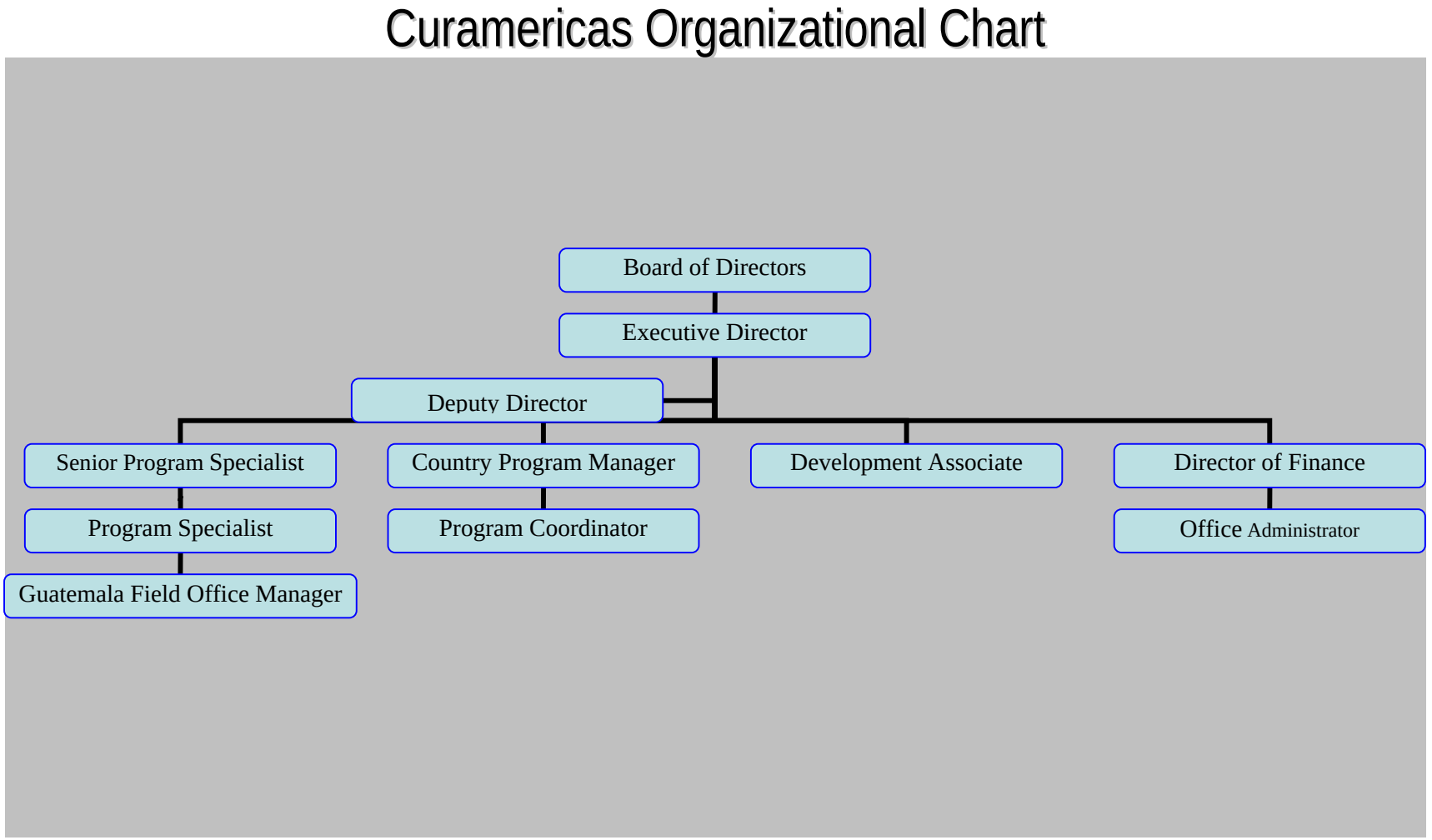
Health facilities in the project area face huge challenges, but these challenges can be met with training, supervision, and access to materials. Community education will also play a very supportive role, helping parents become aware of danger signs (e.g., through the Care Groups) so that children can be brought to a clinic in a timely fashion, and helping parents learn appropriate home management behaviors as well as important prevention messages.

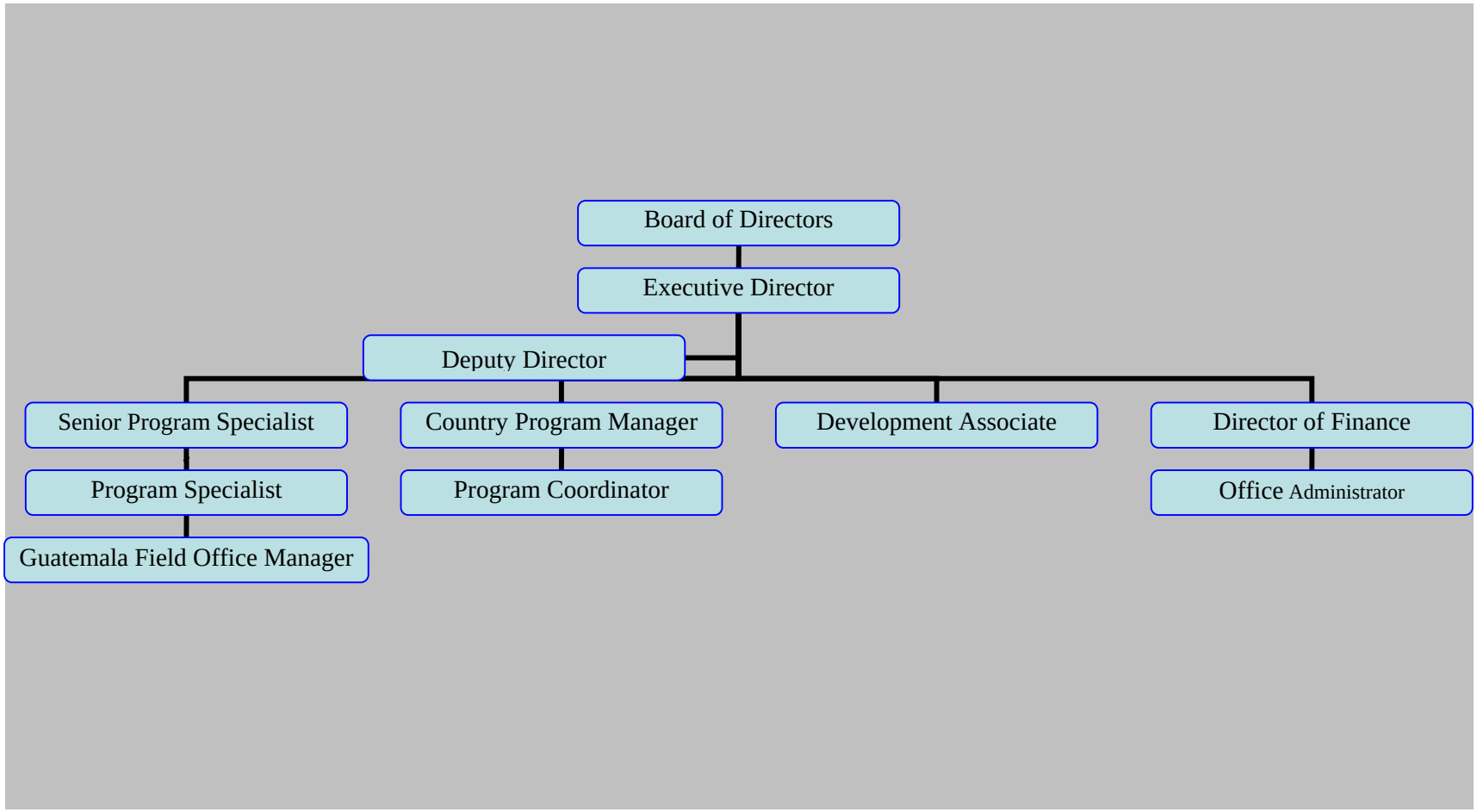
ANNEX D: PROJECT MAPS

Annex F: Map of Project Areas (Three Municipalities)

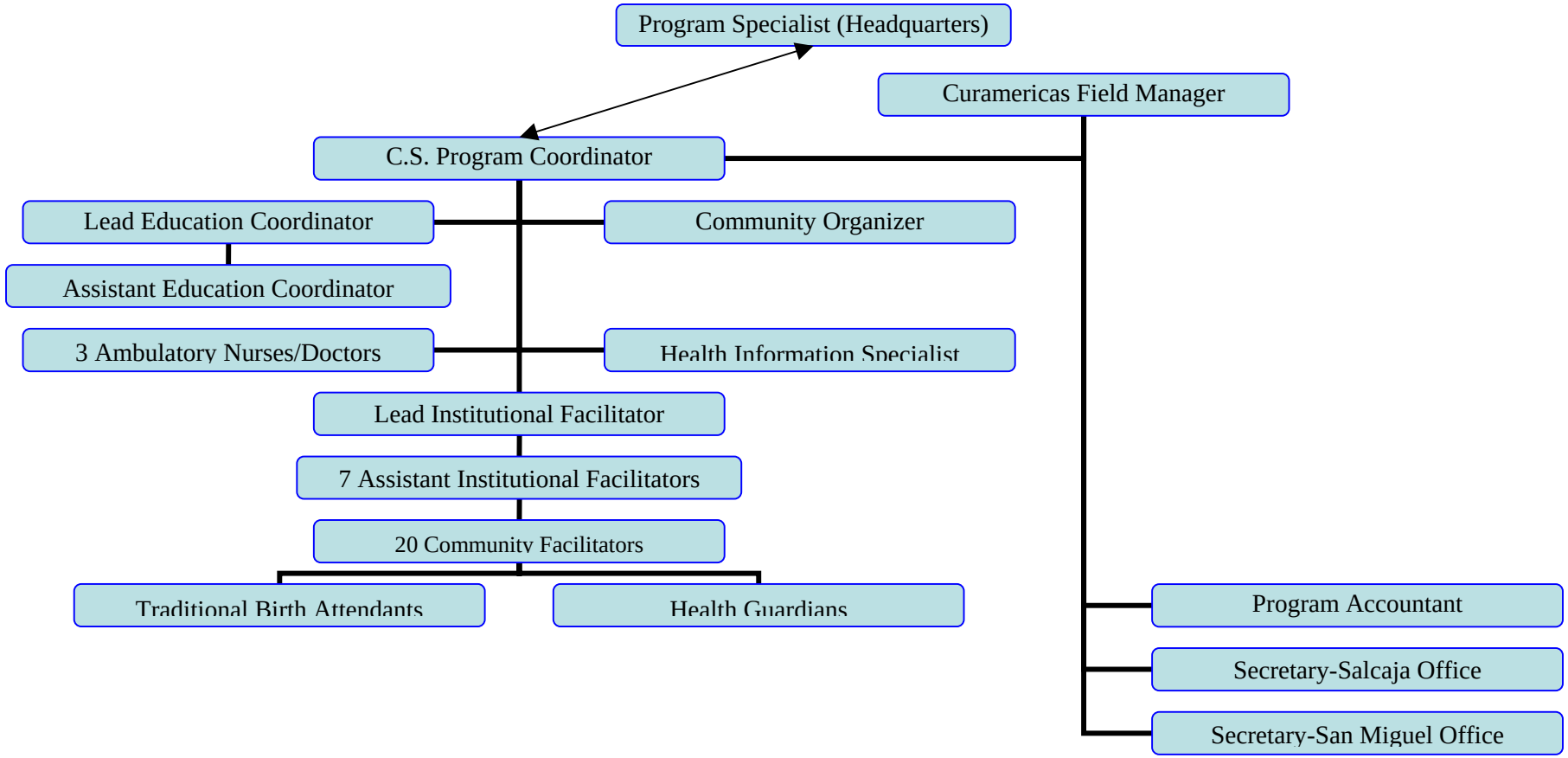


ANNEX E: ORGANIZATIONAL CHARTS

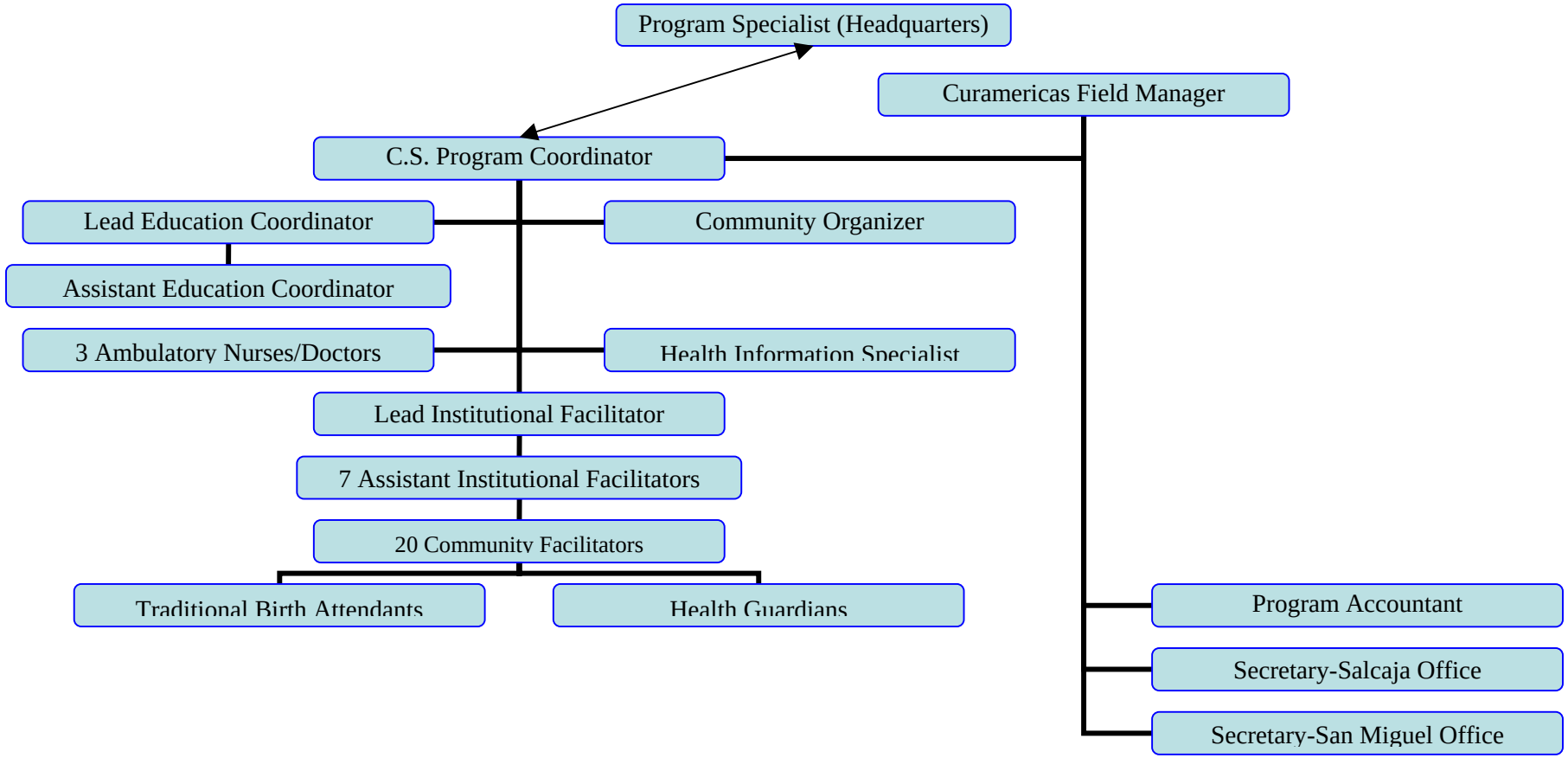



Board of Directors
Executive Director
Deputy Director
Senior Program Specialist
Country Program Manager
Development Associate
Director of Finance
Program Specialist
Program Coordinator
Office Administrator
Guatemala Field Office Manager

Curamericas-Guatemala Organizational Chart



Curamericas-Guatemala Organizational Chart



ANNEX F: PROJECT ACTIVITIES TIMELINE

Curamericas Guatemala CS 18
Project Activities Timeline

Activity	Time Period	Staff Responsible
Project Year #1 (FY 2003)		
Hire additional staff needed for first phase of the project; Staff Orientation and basic administrative training; CS Startup Workshop ; Development of Year #1 Annual Implementation Plan; Curamericas Administration Training (two-day workshop) **(Curamericas backstop visit #1)**	By October 2002, starting interviews in June 2002 (some staff already hired – see HR plan)	CSP Coordinator (Dr. Mario Valdez), Curamericas Senior Program Specialist , and Program Administrator
Administration of MOH SIAS Funds training	October-02	MOH/SIAS trainer
Begin monthly Coordination Team Meetings	October 2002 –2007	CSP Coordinator
Community mapping and pre-census activity	October - November, 2002	Institutional Facilitators, Community Leaders
Baseline Survey (KPC and Focus Groups)	November to December 2002	External consultant (Julie Mobley, MSPH)
Health Facility Assessment, and establishment of health facility indicators **(SPS backstop visit #2)**	March-03	Curamericas Program Specialist, CSP Coordinator
MOH immunization training	March-03	MOH trainer
Census and CBIO methodology training	March-03	CSRA Consultant, IFs, CFs
ADs and IFs begin health outreach posts (Jornadas)	April-03	Ambulatory Doctors, Institutional Facilitators
Write DIP	April-03	Curamericas Country Program Manager
Development of Educational Modules, Set #1, for Health Volunteers (HVs) on: Care Group/HV role, Immunization, Vitamin A supplementation, Worms/Deworming, vital events reporting.	March – July 2003	Curamericas Program Specialist, Education Coordinator
Conduct full census in phase one communities;	April – May 2003	Institutional Facilitators, Community Facilitators, and Health Volunteers
Baseline Eval. of Organizational Capacity and establishing organizational capacity indicators	June-03	Curamericas Program Coordinator
Establish manual and computer technical and financial reporting systems;	June-July 2003	Curamericas Program Coordinator

Staff training in use of HIS forms (MOH trains most staff; IFs train CFs)	June-03	MOH
IMCI Clinical Training for clinical staff	June-03	Calidad en Salud Trainer
Start monthly Care Group Meetings	July-03	Education Coordinator
Training of Educ. Coordinator, IFs, and CFs in Use of Health Volunteer Educational Modules, Set #1, plus Supervision/CQI Training **(Backstop visit #3)**	July-03	Curamericas Program Specialist, Education Coordinator
Devel. of Year #2 Annual Implementation Plan	July-03	Curamericas SPS, CSPC, Program Administrator
Vital events reporting.	July-03	IFs
Development of Educational Modules for HVs, Set #2: Recognition and management/ referral of diarrhea, pneumonia, and danger signs	August-September 2003	Curamericas Program Specialist, Education Coordinator
Project Year #2 (FY 2004)		
Selection of CFs; initial training	October-03	Education Coordinator, Institutional Facilitators
CFs begin use of Child and Women's Registers	October-03	IF, CF, & HV
TIPs and PD Workshop and Evaluation & PD study **(Curamericas backstop visit #4)**	October-03	Curamericas SPS, Education Coordinator
Conduct full census in phase two communities; new CFs begin use of Child and Women's Registers	November – December 2003	Institutional Facilitators, Community Facilitators, and Health Volunteers
CFs begin health activities/home visits to defaulters	November-03	Education Coordinator, Institutional Facilitators
Selection of phase one HVs, and initial training	November-03	Education Coordinator, IFs, CFs
CFs teach HVs, and HVs teach mothers using educational modules, Set #1.	November-03	Community Facilitators, Health Volunteers
Development of Educational Modules, Set #3: Nutrition and micronutrients	November – December 2003	Curamericas Program Specialist, Education Coordinator
Training of IFs and CFs in Set #2 Module, Feedback on Module #1 **(backstop visit #5)**	December-03	Education Coordinator / SPS
Annual Mini-KPC Survey	December-03	HIS, IFs, CFs
Community IMCI Training for IFs and CFs	January-03	Calidad en Salud Trainer
TOT for Auxiliaries/MDs on Maternal/Newborn Care	January-February 2004	CSPC and Curamericas Senior Program Specialist

CFs teach HVs, HVs teach moms in Set #2 module	February-Marzo 2004	Community Facilitators, Health Volunteers
Begin monthly TBA Training	February-04	Health Auxiliaries and doctors
Development of participatory educational modules for HVs, Set #4: Maternal and newborn care	February – March 2004	Education Coordinator with support from Curamericas Program Specialist
Nutrition& GM/P Training **(Curamericas backstop visit #6)**	Marzo-Abril 2004	Education Coordinator with support from Curamericas Program Specialist
GM/P added to health outreach posts (Jornadas)	Abril 2004	Institutional Facilitators
Development of Educational Modules for HVs, Set #5, on child spacing	April – May 2004	Education Coordinator with support from Curamericas Program Specialist
Training of IFs and CFs in Educational Module, Set #3: Nutrition and micronutrients	May-04	Education Coordinator with support from Curamericas Program Specialist
CFs teach HVs, and HVs teach mothers in Set #3 educational modules, nutrition and micronutrients	May-June 2004	Community Facilitators, Health Volunteers
Child Spacing Training	June-04	APROFAM Trainer (consultant)
Epi-Info Training **(Curamericas backstop visit #7)**	June-04	Curamericas Program Specialist
Training of IFs and CFs in Educational Module, Set #4, maternal and newborn care	July-04	Education Coordinator with support from Curamericas Program Specialist
Development of Year #3 Annual Implem. Plan	June-04	CSPC, Program Administrator, SPS
CFs teach HVs, and HVs teach mothers in Set #4 educational module, maternal and newborn care	July-September 2004	Community Facilitators, Health Volunteers
Training of IFs and CFs in Use of Educational Module, Set #5: Child spacing	August-04	Education Coordinator with support from Curamericas Program Specialist
CFs teach HVs, and HVs teach mothers in Set #5 educational modules: Child spacing	August-October 2004	Community Facilitators, Health Volunteers
Project Year #3 (FY 2005)		
Automation of HIS: Training in use of Pocket PCs **(Curamericas backstop visit #8)**	October-04	Curamericas Program Specialist
Selection of remaining CFs, and initial training; CFs	October-04	Education Coordinator, Institutional Facilitators
These CFs begin community health activities	November-04	Education Coordinator, Institutional Facilitators

Conduct full census in phase three communities; new CFs begin use of Child and Women's Registers	November – December 2004	Institutional Facilitators, Community Facilitators, and Health Volunteers
Selection of remaining HVs, and initial training	November-December 2004	Educ. Coordinator, IFs, CFs
Start Care Group Meetings in Phase 2 communities	November-04	Community Facilitators
Nutrition refresher course (inservice)	November-04	Education Coordinator
Annual Mini-KPC Survey	December 2004 & 2005	HI Specialist, Institutional Facilitators, Community Facilitators
IFs progressively train new area CFs in each intervention and all HV Educational Modules	December 2004 – November 2005	Institutional Facilitators
CFs teach HVs, and HVs teach mothers in Sets #1 to #5 participatory educational modules	January 2005 – March 2006	Community Facilitators, Health Volunteers
Development of Annual Implementation Plans	Sept. 2005 & 2006	CSPC, Program Administrator, SPS
Project Years #4 and #5 (FY 2006 and 2007)		
Continuation of Year #3 activities (see above)	October 2005-2007	(See above.)
Final Organizational Capacity Assessment	August-07	CSP Coordinator
Final Evaluation (including KPC and Focus Groups)	September-07	Consultant and CSP Coordinator

ANNEX G. TRAINING PLAN

Codes for table: CSPC = Child Survival Program Coordinator; HIS = HIS Specialist; SEC = Secretary; IFs = Institutional Facilitators (who are nurses); ADs = Ambulatory Doctors/Nurses; EC = Education Coordinator; DDs = District Doctor(s); MRLs = Micro-region Leaders; ADM = Program Administrator; HFN = Other health facility nurses (registered and auxiliary) in the MOH and ASSDI health facilities; CFs = Community Facilitators (paid CHWs, some of whom will be managed by ASSDI, some by the MOH, and most by /Curamericas); MAC = MOH Area Chief. TBAs = Traditional Birth Attendant. TD = Tom Davis; MD = Mary DeCoster; GS = Gladys Shanklin. MOH and *NGO participants throughout the Huehuetenango Area will be included in selected trainings.*

Training	Days	Who Invited	Trainers (HQ staff in parentheses)
Staff Orientation and Basic Administrative Training	2 days	CSPC, HIS, SEC, IFs, ADs, EC	Curamericas staff (MD)
CS Startup Workshop	1 day	CSPC, HIS, IFs, ADs, DDs, HFNs, 12 MRLs, MAC, EC	Curamericas and staff (MD)
Curamericas Administration Training	2 days	CSPC, ADM, DDs	Curamericas (GS)
Administration of SIAS Funds	5 days	CSPC, ADM, DDs	MOH, from SIAS funds
Baseline KPCs, LQAS, & Focus Group training and execution	2 weeks	CSPC, HIS, IFs, ADs, EC, MAC, and CFs	Consultant (Julie Mobley)
Baseline Organizational Capacity Evaluation	2-3 days	CSPC, HIS, IFs, ADs, ADM, EC	Curamericas (GS)
Use of HIS Forms	2 days	ADs, DDs, HFNs, IFs, HIS, EC	MOH
Use of HIS Forms for Promoters	1 day	CF, EC, IFs	IFs (), Educ. Coordinator
Health Facility Assessment	7 days	CSPC, HIS, IFs, ADs, HFNs, MAC, ASSDI Reps	Curamericas (MD)
Immunization	5 days	IFs, HFNs	MOH
Census / Mapping	2 days x 2 areas	CSPC, HIS, IFs, ADs	CSRA and staff
Training in Nonformal Education, Educational Methods, and Use of Guardian Modules	5 days	CSPC, IFs, EC, several CFs + 12 other participants from Huehuetenango Area MOH and NGOs	Curamericas (MD)
Supervision and Continuous Quality Improvement	4 days	CSPC, HIS, IFs, ADs, HFNs, DDs, 12 MRLs, MAC, EC	Curamericas (MD)
IMCI Clinical	15 days	ADs, IFs, HFNs	Project Hope trainer
Community IMCI	15 days	CSPC, HIS, IFs, CFs, EC	Project Hope trainer
TIPs and PD Training & Evaluation	7 days	CSPC, IFs, ADs, EC, several CFs + 12 other participants from Huehuetenango Area MOH and NGOs	Curamericas (MD)
SCM of Pneumonia	2 days x 2 groups	EC, IFs, HFNs, CFs	/ MOH
TOT on Maternal and Newborn Care (TOT for TBA trainers including (Bang Methods)	5 days	CSPC, EC, IFs, ADs, HFNs (and these train TBAs)	Curamericas and staff (MD)
Growth Monitoring / Promotion, Nutrition, and Micronutrients	3 days x 2 groups	EC, IFs, HFNs, CFs	/ Curamericas (MD)
Child Spacing Training	4 days	CSPC, EC, IFs, HFNs, ADs (and these train TBAs and CFs)	MOH
Epi-Info	5 days	HIS, CSPC, IFs + 8 other participants from Huehuetenango Area MOH and NGOs	Curamericas (MD)
PocketPC Training	3 days	IFs, HIS, CSPC	Curamericas (MD)
Nutrition refresher course (inservice)	2 days	EC, IFs, HFNs, CFs	/ Curamericas
Sustainability Workshop	2 days	CSPC, HIS, DD, MAC	Curamericas

ANNEX H: EXAMPLES OF QUALITY IMPROVEMENT VERIFICATION CHECKLISTS

CHECKLIST FOR GROWTH MONITORING & COUNSELING

CHW: _____ Community: _____ Score: _____

EVALUATOR: _____ Date: ____/____/____

	YES	NO
1. Does the Community Health Agent (CHW) have a functioning **scale**?	❑	❑
2. Does the CHW have a stock of at least **5 blank growth charts**?	❑	❑
3. Was the scale **set to zero** before the weighing session?	❑	❑
4. Was the scale set to the CHW's **eye level**?	❑	❑
5. Was the child **stripped** to underwear, a dry diaper, or T-shirt before weighing?	❑	❑
6. Did the CHW have the **mother participate** in the weighing?	❑	❑
7. Was the pointer relatively **still** when the weight was taken?	❑	❑
8. Was the **scale read correctly**?	❑	❑
9. Was the mother told the weight of her child in **kilograms**?	❑	❑
10. Was the mother told the weight of her child in **pounds**?	❑	❑
11. Was the weight **recorded correctly** on the growth chart?	❑	❑
12. Were the **months written correctly** on the growth chart?	❑	❑
13. Was the **correct vertical line** used?	❑	❑
14. Was the **mother told the difference** in her child's weight compared to the previous month?	❑	❑
15. Was the **growth chart used** to do this?	❑	❑
16. Did the CHW explain whether her child was **gaining weight or not**?	❑	❑
17. Was the **growth chart used** to do this?	❑	❑
18. Was the mother told if her child was **malnourished or not**?	❑	❑

19. *If the child was gaining weight*, did the CHW ask the mother what she was **doing to make the child gain** weight? ..... ❑ ❑

20. Did the CHW ask the mother open-ended questions to fill in the **behavior box**? .. ❑ ❑

YES NO

21. Did the CHW **fill in the behavior box** properly? ..... ❑ ❑

22. Did the CHW **compliment** the mother for what she was doing correctly? ..... ❑ ❑

23. Did the CHW urge the mother to **continue** the things she was doing correctly? ... ❑ ❑

24. Did the CHW **counsel the mother** on any problems identified during the diagnosis? ..... ❑ ❑

25. Did the CHW urge the mother to **change any behaviors** that needed to be changed? ..... ❑ ❑

26. Was the CHW ask the mother what **things that would make it difficult** for her to follow the advice that she was given? ..... ❑ ❑

27. *If so*, did the CHW help the mother to work through any **obstacles**? ..... ❑ ❑

28. Was the counseling the mother received **relevant**? ..... ❑ ❑

29. Was the counseling the mother received **correct**? ..... ❑ ❑

Overall Quality of the Counseling

1 2 3 4 5 6 7 8 9 10

Poor Excellent

Comments:

_____

_____

_____

30. If the child had been ill, did the CHW talk about ways to **prevent or manage the illness**? ..... ❑ ❑

31. Did the CHW **verify** that the **mother understood** the advice by using questions? ... ❑ ❑

32. Did the CHW ask the mother to **mention the key things that she should stop doing**? ..... ❑ ❑

33. Did the CHW ask the mother to **repeat back the key things that she should continue to do** in the upcoming month(s)? ..... ❑ ❑

34. Did the CHW ask the mother to **commit to the suggested behaviors**? ..... ❑ ❑

35. Did the CHW ask the mother if she had any **questions about her child's growth or health**? ..... ❑ ❑

COMMENTS:

_____

_____

_____

_____

_____

CHECKLIST FOR EDUCATION SESSIONS BY

COMMUNITY DEVELOPMENT WORKERS (CDWs)

Name of CDW:_____
Evaluator:_____
Community: _____ Date:
_____

METHODS	**YES**	**NO**
1. Did the CDW seat people so that all could see each others' faces?	❑	❑
2. Did the CDW open the session in prayer?	❑	❑
3. Did the CDW wear appropriate clothing?	❑	❑
4. Did the CDW sit at the same level as the other participants?	❑	❑
5. Did the CDW use a participatory method? (game, skit, song, story, other -- SPECIFY:_____)	❑	❑
6. Did the CDW introduce the topic well (who s/he is, topic, time)?	❑	❑
7. Did the CDW ask questions to relate the topic to the participants' experiences?	❑	❑
8. Did the CDW use the brainstorming technique at appropriate moments?	❑	❑
9. Did the CDW speak loud enough that everyone could hear?	❑	❑
10. Did the CDW use proper eye contact with everyone?	❑	❑
11. Did the CDW use changes in voice intonation (not monotone)?	❑	❑
12. Did the CDW speak slowly and clearly?	❑	❑
13. Did the CDW move around the room without distracting the group?	❑	❑
14. Did the CDW use any props?	❑	❑
15. Did the CDW demonstrate any skills that s/he was promoting?	❑	❑
16. Did the CDW verify that people understood the main points using open-ended questions?	❑	❑
17. Did the CDW summarize the essential points presented at the end?	❑	❑

DISCUSSION		
18. Did the CDW ask the participants lots of (non-rhetorical) questions?	❑	❑
19. Did the CDW give participants adequate time to answer questions?	❑	❑

	YES	NO
20. Did the CDW encourage discussion amongst participants?	❑	❑
21. Did the CDW encourage comments by paraphrasing what people said (repeating statements in his or her own words)?	❑	❑
22. Did the CDW ask participants if they agree with other participants' responses?	❑	❑
23. Did the CDW encourage comments by nodding, smiling, or other actions that show s/he was listening?	❑	❑
24. Did the CDW ALWAYS reply to participants in a courteous and diplomatic way?	❑	❑
25. Did the participants make lots of comments?	❑	❑

1 2 3 4 5 6 7 8 9 10
Poor Excellent

26. Did the CDW prevent domination of the discussion by 1 or 2 people?	❑	❑
27. Did the CDW encourage timid participants to speak/participate?	❑	❑
28. Did the CDW summarize the *discussion*?	❑	❑
29. Did the CDW reinforce statements by sharing relevant personal experience, or asking others to share personal experience?	❑	❑

CONTENTS

30. Was the content of the educational messages CORRECT?	❑	❑

1 2 3 4 5 6 7 8 9 10
Poor Excellent

31. Was the content of the educational messages RELEVANT?	❑	❑

1 2 3 4 5 6 7 8 9 10
Poor Excellent

32. Was the content of the educational messages COMPLETE?	❑	❑

1 2 3 4 5 6 7 8 9 10
Poor Excellent

33. OVERALL EVALUATION OF THE CDW's EDUCATIONAL PERFORMANCE:

1 2 3 4 5 6 7 8 9 10
Poor Excellent

Comments:

_____

_____

_____

_____

_____

ANNEX I. CURAMERICAS CHECKLIST FOR CENSUS PROCESS

CURAMERICAS CHECKLIST FOR CENSUS PROCESS

Health Worker _____ Community: _____
Score: _____ Evaluator: _____ Date: ____/____/____

ASK THE HEALTH WORKER

YES NO

1. Did the Health Worker know the **limits of the area** that s/he was censusing? .....

1. Did the Health Worker know **what to do when no one was at home**? (return later) .....
2. Did the Health Worker know to **leave a number for each empty house**? .....
3. Did the Health Worker **know to mark "refused**" on the census form if the person refused to participate in the census? .....

Did the Health Worker mention the key messages to include in the promotion of the census, namely:

4**. Who s/he is**. .....
5. **CURAMERICAS/MSP and Health Center ____ are doing the census**. .....
6. CURAMERICAS/MSP are conducting a child survival project in the area .....
7. The project is **starting now**. .....
8. The importance of **telling the truth** during census. .....
9. We will **use the census information to register women and children in the project and to better understand when and why children are dying** in the area. .....
10. The **date** their area will be censused. .....
11. We would **like their help** in identifying houses in the area. .....

OBSERVE THE CENSUS PROCESS

Introduction:

12. Did the Health Worker **present himself** properly to the person who came to the door? .....
13. Did the Health Worker ask to speak to the head of the household? .....
14. If the head of household was not at home, did the Health Worker ask to speak to another adult in the household? .....
15. If there was not an adult in the household, did the Health Worker offer to return later? .....
16. If there was not an adult in the household, did the Health Worker mark the card to remember to return? .....

Did the Health Worker tell the person:

17. his or her **name**? .....
18. that **CURAMERICAS/MSP and Dispensary X** are doing the census. .....

19. that CURAMERICAS/MSP are conducting a child survival project in the area. .....
20. that **the project is starting now**. .....
21. that it is **important to tell the truth** during the census. .....
22. that CURAMERICAS/MSP will **use the census information to register women and children in the project and to better understand when and why children are dying in the area**. .....
23. that **the interview will take about 10 to 15 minutes**. .....

24. Did the Health Worker **assign the correct number** to the household? .....
25. Did the Health Worker fill out **the other parts of the top of the form** correctly? .
26. Were there any parts of the form filled in improperly? .....

(PLEASE SPECIFY:) _____

_____

Left-Hand Column of the Form:

Did the Health Worker fill out the left hand column properly, including:

27. How many **rooms** the house has (not counting outside kitchens)? .....
28. Type of **roof**? .....
29. A **latrine** that can be used presently? .....
30. Presence of **radio**[36]? .....
31. Presence of **TBA**? .....
32. Type of closest fixed **health facilities**? .....
33. Roundtrip **time to closest health facilites**? .....
34. Usual **water source**? .....

Other Persons Section:

Was the "other persons" section filled out properly, including:

35. Putting only people in this section who were not children under five or women between 15-49 years of age? .....
36. Writing in each person's complete **name**? .....
37. Writing in each person's **sex**? .....
38. Writing in each person's **date of birth** in the correct format (dd/mm/yy)? .....
39. If the person could not remember their date of birth, did the Health Worker ask for a **document** that might have the DOB listed on it? .....
40. If the **events calendar** was used to estimate the person's year of birth, was it used properly? .....
41. Were the **other columns appropriately left blank**? .....

42. Did the Health Worker ask for the **names of all the people who had lived in the household who had died in the last 12 months** (e.g., "since May 1998") who died while they were living in the house? .....
43. Did the Health Worker mark these persons' **names** properly on the form? .....

[36] Yes to radio = electric, or battery-operated with good batteries.

44. Did the Health Worker record the person's **date of death** on the census form? .....
45. Did the Health Worker offer his/her **condolence** to the person? .....
46. Health Worker ask the respondent **what killed the person** who died? .....
47. Did the Health Worker ask the respondent what **other symptoms** the person had shortly before s/he died? .....
48. Did the Health Worker fill in the **other information** for these people who had died (e.g., civil status at death, pregnant when died, etc.)? .....
49. ***VERY IMPORTANT***: After the person mentioned all of the people who had died during the last 12 months, **did the Health Worker read back those person's names and ask if anyone else in the household had died during the last 12 months**? .....

Women's Section:

For each of the women who are living in the household, did the Health Worker:

50. Properly fill in the complete **name** of the women? .....
51. Properly fill in the **date of birth** in the proper format? .....
52. Properly fill in the present **marital st**atus? .....
53. Properly fill in how many **living ch**ildren the woman has? .....
54. Properly fill in how many **doses of tetanus toxoid** the woman has received using a vaccination card?[37] .....
55. Properly fill in the **Pregnant / FP method column**? .....
56. Did the Health Worker leave the **other columns blank**? .....
57. Did the Health Worker **verify which women 15-49 had died** during the last 12 months? ..

Children 0-5 Section:

For each of the children under five years of age who are living in the household, did the Health Worker:

58. Properly fill in the **name**? .....
59. Properly fill in the **mother's series number**? .....
60. Properly fill in the child's **sex**? .....
61. Properly fill in the child's **date of birth**? .....
62. Put an X in the appropriate column if the child was **an infant**? .....
63. Properly fill in **how many doses of each vaccine** the child had received using the child's growth chart or other vaccination card? .....
64. Leave **the other columns blank**? .....
65. Verify **which children 0-5 years of age had died during the last 12 months an their cause of death**? .....

66. Did the Health Worker **thank the person** for their time? .....

[37] (No card = blank; 0 = Has card, no TT doses)

ANNEX J. CHILD VERBAL AUTOPSY FORM

Curamericas Child Verbal Autopsy Form

Tell the family the purpose of your visit:

- To talk with them about the child who died in their family.
- To better understand why he or she died so that FOCAS might be able to prevent other children from dying.
- To offer our condolences to the family.
- Mention that – while it is important for us to get information – at any point the family wants to take a break and not talk about it for a few minutes, they should feel free to do so.

1. Person completing form: _____ 2. Date of verbal autopsy: ___/___/___

3. Suspected cause of death listed on Vital Events Registry: _____

4. Name of child who died:_____

5. Child's age at death: _____ months. If the child died before the 41st day of life then how many days after delivery did the child die? (Note: Put 0 if on day of delivery)

6. Child's date of birth: ____/___/___ 7. Child's Date of death: ___/___/___

8. Address: _____

9. Mother's /caregiver's name: _____

10. Person responding to questions: _____. 11. Relationship to child: _____

12. **Nutritional Status.** Indicate the date of the child's last growth monitoring check and place an "X" beside the child's nutritional status at last growth monitoring check:

Date: ___/___/___. Nutritional Status: M1:___ M2:___ M3: ___ .

13. If the child was under 41 days old, was the child **low birth weight**?

Yes:___ No: ___ Child was 41 or more days old: ____

14 . **Education of Mother / Caregiver**. Indicate **"yes"** or **"no"** if the child's mother or primary care giver was educated on each topic and write the **date** of each education session given.

Breastfeeding (0 m) No__ Yes: __/__	Post natal care & danger signs (0 m) No__ Yes: __/__	Pneumonia danger signs (1 m) No__ Yes: __/__	Oral rehydration therapy (2 m) No__ Yes: __/__	Pneumonia danger signs (refresher) (16 m) No__ Yes: __/__

15. **Acute Respiratory Infection** Did the child have Acute Respiratory Infection within 30 days before death? Yes:___ No: ___ If "yes" then continue with 15.a., if "No" then skip to Question 16.

15.a. Did the child have pneumonia? Yes:___ No: ___

15.b. If the child had pneumonia was the child followed up with 48 hours after beginning treatment? Yes:___ No: ___

16. Did the child have Diarrhea within 30 days before death? Yes:___ No: ___

If "No" then skip to Question 17.

16.a. Did the child receive a follow up visit with 24 hours after the first visit? (Recommended if the child has signs of dehydration, severe disease, has diarrhea and vomiting, or if the child was referred). Yes:___ No: ___

17. Social status of family: ❑ Above average resources ❑ Average ❑ Below Average

18. Family members, neighbors, and others attending to the child or nearby at time of death (list all):

_____

19. Indicate below who attended the child (check all):

❑ CHA ❑ Mother ❑ Grandmother ❑ Other family

❑Nurse ❑ Doctor ❑Other_____

20. If CHA, doctor, or nurse, indicate the name of the person(s) attending the birth:

_____

21. Location of death: ❑ Home ❑ Relative's house ❑ Hospital ❑ Clinic ❑ Other

22. How old is the next oldest sibling to the child that died? _____ months.

23. Has the child's mother had any other child deaths before this one? Yes:___

`If so, how many? _____No: ___

24. ***NARRATIVE***

(Tell the person:) I need you to tell me now exactly what happened from the time that you noticed that (NAME) was sick until the day that he / she died. It is important that we know all the details so that we can try to prevent similar deaths from happening in the future. So please take your time and be sure to mention on what days and times the different things happened that led up to (NAME's) death. Remember that if at any point you want to take a break and not talk about it for a few minutes, you are free to do so. (WRITE FULL NARRATIVE BELOW. BE SURE TO ASK ABOUT AND INCLUDE:)

- **Dates and times** when each event happened.
- **Signs and symptoms** seen at each point in time.

- **Problems with the child eating or drinking** during the illness, and **problems** found during rally post visits
- **Any other health problems** the child had, especially within the last month before death.
- **Details on any delays** that occurred that could have possibly been associated with the death (e.g., delay in recognizing the problem, delay in making a decision about care, delay in getting transport to the clinic or hospital, delays in receiving care once at facility).
- **WHO** made or contributed to each decision mentioned.
- **Once care was received, were there any problems with follow-up care or home care** of the child that could have possibly been associated with the death? (e.g. did the caregivers know how to properly administer any prescribed treatments?, did they know how quickly the child should have improved and what to do if the child did not improve?, did they know the danger signs and where they should seek help?, did they know when to return to the clinic?, did the health agent make follow-up visits if this was indicated?).

- **Any health history or background information** that could possibly be important (e.g., that the child had asthma, had parasites, had malaria)

(Write the full narrative below. Use the back if more space is needed. Be prepared to relate the entire story of this woman's death in detail during the next Mortality Review Session:)

25. **At what time – day and hour – did the caregiver recognize that the child had a problem requiring medical attention (from CHA, Health Center, Clinic or Hospital) ?** _____

26. Were delays in **recognizing the problem** found?.....❑Yes ❑No

- If yes, please explain the nature of the delay:

_____
_____
_____
_____

27. At what time – day and hour – did the caregiver decide to seek medical attention? _____

28. Were delays in deciding **to seek medical attention** found? ❑Yes ❑No

- If yes, please explain the nature of the delay (e.g., cost, distance):

_____
_____
_____
_____

29. At what time – day and hour – did the child reach a health facility?

_____

30. Were delays in **reaching a health facility** found? .....❑Yes ❑No

31. ***If there was a delay in reaching a facility***, was the delay related to:
    - Distance to health facility.....❑Yes ❑No
    - Availability of money .....❑Yes ❑No
    - Knowledge of where to go.....❑Yes ❑No
    - Problems with health facility personnel .....❑Yes ❑No

    If there were any delays in reaching a facility, please explain the nature of the delay:

_____
_____
_____

32. **At what time – day and hour –** did the child reach the health facility?
_____

33. **At what time – day and hour – was treatment begun** by a health professional at the health facility? _____

33. Delays in **receiving care once at a health facility** found?.❑Yes ❑No

If yes, please explain the nature of the delay:

_____
_____

_____
_____

34. Were problems with **follow-up care or home care <u>after receiving medical care</u> found?** ❑Yes ❑No

35. Was the problem related to how the caregivers were oriented? Did the caregiver(s) know:

- How to administer prescribed treatment. ❑Yes ❑No
- What to do if the child did not improve? ❑Yes ❑No
- The danger signs? ❑Yes ❑No
- When to return to the clinic or find the health agent? ❑Yes ❑No

36. Was a follow up visit from the health agent indicated? ❑Yes ❑No
If "yes" did the health agent make the visit within the indicated time? ❑Yes ❑No
If "no" then why not? _____

37. If there were any other problems with follow-up or home care **<u>after receiving medical care</u>**, please explain the nature of the problem:

_____

_____

_____

38. Supervisor's Signature: _____

ANNEX K: MATERNAL VERBAL AUTOPSY FORM

Curamericas Maternal Verbal Autopsy Form

Tell the family the purpose of your visit:

- To talk with them about the woman who died in their family.
- To better understand why she died so that FOCAS might be able to prevent other women from dying.
- To offer our condolences to the family.
- Mention that – while it is important for us to get information – at any point the family wants to take a break and not talk about it for a few minutes, they should feel free to do so.

1. Person completing form: _____ 2. Date of verbal autopsy: ___/___/___

3. Suspected cause of death listed on Vital Events Registry: _____

Check Women's Register: Indicate if the woman was educated on each topic:

4. Nutrition: ❑Yes ❑No 5. Hygiene: ❑Yes ❑No 6. Emergency Plan: ❑Yes ❑No

7. Social status of family: ❑ Above average resources ❑ Average ❑ Below Average

8. Name of woman who died:_____ 9. Address: _____

10. Husband's name: _____ 11. Woman's Date of death: ___/___/___

12. Person responding to questions: _____ 13. Relationship to deceased: _____

14. Woman's date of birth: ____/___/_____ 14. Woman's Age at death: _____ years

15. Family members, neighbors, and others attending to the woman or nearby at time of death (list all):

_____

16. Indicate below who attended the birth or emergency:

❑ Untrained Midwife/TBA ❑ Husband ❑ Grandmother ❑ Other family
❑ Trained TBA ❑Nurse ❑ Doctor ❑Other_____

17. If trained or untrained TBA, doctor, or nurse, indicate the name of the person(s) attending the birth: _____

18. If death during pregnancy, at what point in pregnancy did woman die: ____ month

19. If death during or after delivery, at how many days after delivery: ____ days
(NOTE: Put 0 if on day of delivery.)

20. Location of death: ❑ Home ❑ Relative's house ❑ Hospital ❑ Clinic ❑ Other

21. Number of pregnancies this woman had (including last): _____ total pregnancies

22. How many spontaneous and provoked abortions: _____ previous abortions

23. How many stillbirths: _____ previous stillbirths

24. Months between this pregnancy and previous pregnancy: _____ months between

25. Number of living children at time of death: _____ children

26. ***NARRATIVE***

(Tell the person:) I need you to tell me now exactly what happened from the beginning of (NAME's) pregnancy until the day that that she died. It is important that we know all the details so that we can try to prevent similar deaths from happening in the future. So please take your time and be sure to mention on what days and times the different things happened that led up to (NAME's) death. Remember that if at any point you want to take a break and not talk about it for a few minutes, you are free to do so. (WRITE FULL NARRATIVE BELOW. BE SURE TO ASK ABOUT AND INCLUDE:)

- **Dates and times** when each event happened.
- **Signs and symptoms** seen at each point in time.
- **Diet and prenatal care** during pregnancy, and **problems** found during prenatal checks.
- **Details on any delays** that occurred that could have possibly been associated with the death (e.g., delay in recognizing the problem, delay in making a decision about care, delay in getting transport to the hospital, delays in receiving care once at facility).
- **WHO** made or contributed to each decision mentioned.
- **Any health history or background information** that could possibly be important (e.g., that the woman had had a poor delivery outcome previously, had drug allergies, had anemia)

(Write the full narrative below. Use the back if more space is needed. Be prepared to relate the entire story of this woman's death in detail during the next Mortality Review Session:)

27. **At what time – day and hour – did the person attending recognize that the woman had a problem requiring emergency care?**

_____

28. Were delays in **recognizing the problem** found?.....❑Yes ❑No

- If yes, please explain the nature of the delay:

_____
_____
_____
_____

29. At what time – day and hour – did the person decide to seek emergency

care? _____

30. Were delays in deciding **to seek emergency care** found?...❑Yes ❑No

- If yes, please explain the nature of the delay (e.g., cost, distance):

_____
_____
_____
_____

31. At what time – day and hour – did the person reach a health facility?

_____

32. Were delays in **reaching a health facility** found? .....❑Yes ❑No

33. ***If there was a delay in reaching a facility***, was the delay related to:

- Distance to health facility.....❑Yes ❑No
- Availability of money .....❑Yes ❑No
- Knowledge of where to go.....❑Yes ❑No
- Problems with health facility personnel .....❑Yes ❑No

If there were any delays in reaching a facility, please explain the nature of the delay:

_____
_____
_____

34. **At what time – day and hour – was treatment begun** by a health professional at the health facility? _____

35. Delays in **receiving care once at a health facility** found?.❑Yes ❑No

If yes, please explain the nature of the delay:

_____
_____
_____
_____

36. Supervisor's Signature: _____

ANNEX L: MONTHLY REPORTING FORM

Curamericas CS Program Manager's Monthly Report

Program Manager: _____ For Month/Year: _____ /____

Date Completed: ____/____/____

Activities and Coverage	Target	Actual
No. of Care Group Meetings		
➢ Number of Mothers Educated		
Number of General Service (EPI) Posts		
➢ Children seen		
➢ Mothers seen		

Trainings in Past Month:			
Topic: _____ Training Agency: _____			
Number of Trainees:			
___ Ambulatory Drs.	___ IFs	___ CFs	___ Nurses (Not IFs)
___ Education Coors.	___ M&E Spec.	___ TBAs	____ Other: _____
Average Pretest: ____%		Average Posttest: _____%	

Stock-outs of Materials Material / Medicine	Available? (Yes/No)	Comments
Vitamin A		
Deworming medicine		
Vaccine		
Antibiotics		
Iron supplements		
ORS packets		
Prenatal multivitamins		
Forms (e.g., growth charts)		
Family Planning Supplies		
Equipment (e.g., scales)		
Other		

Nutrition Activities and Coverage	Target	Actual
Vitamin A capsules given to children		
Vitamin A capsules given postpartum		
Pregnant women receiving iron sulfate		
Children receiving deworming medicines		

Morbidity and Mortality Patterns	Cases, 0-2m	Cases, 3-11m	Cases, 12-59m	Referred
Diarrhea				
ARI only				
Pneumonia				
Pneumonia Follow-up Forms:				
➢ Complete Forms				
➢ Follow-up at 2 days				
➢ Correct Classification				
Diarrhea Follow-up Forms:				
➢ Complete forms				
➢ Follow-up at 1 day				
➢ Correct Referral				
Vital Events:				
	0-2m	***3-11m***	***12-59m***	
Deaths of children, 0-59m of age				
Births				
Pregnant Women				
All deaths of women during pregnancy/ within 45 days of birth, any cause:				

QI Checklist Used This Month	Number of Staff members observed	Average Score
1. Family Planning		
2. ARI		
3. M&E		
4. Diarrhea		
5. Education (group)		
6. Counseling (Individual)		
7. General Services		
8. Growth Monitoring / Counseling		
9. Checklist of Supervisors' use of QI Checklists.		

QI Checklist Used This Month	Number of Staff members observed	Average Score
Other:_____		

Observations on use of QI Checklists:

_____

_____

_____

Immunization: *(See Target Coverage Charts)*

Family Planning Methods Distributed by Type	Count
Depot Provera	
Pills	
Condoms	
LAM	
Norplant	
New Acceptors of FP methods	
Continuing Users of FP methods	
Sterilization	

Maternal and Newborn Data	Count
Births attended by untrained person	
Births attended by trained TBA	
Prenatal controls completed	
Pregnant women counseled on birth plans	
Women who receive postpartum visit in first 7 days	
Women with complications who were referred	
Pregnant women who received two doses of TT	
Women informed on MNC topics during home visits	
People educated about FP	
Women exclusively breastfeeding until 6 months	

Field Visits by CS Program Manager:

Date	Jurisdiction	Activity Observed (e.g., Care Group)	Purpose/Comments

Activities Planned for Next Month & Related Needs:

Project Narrative

(Discuss current situation including meetings, visitors, contracts/ agree-ments, progress on grants/proposals/fundraising, census/vital event activities, problems/issues, trips, continuing education, etc.):

ANNEX M: BEHAVIOR BOX

Things to check with the mother **EACH month:**	Birth: __/__ mon/yr	0	1	2	3	4	5	6	7	8	9	10	11	12
Did the child receive colostrum when s/he was born?														
Is the child currently breastfeeding?														
Is the child currently bottle fed?														
Are other liquids or foods apart from breastfeeding being given?														
Is the child receiving solid foods currently?														
Has the child had diarrhea this month?														
Has the child had a cough?														
Has the child had a fever?														
Has the child had any other illness this month?														

- Put a + in the little box for YES
- Put a – in the little box for NO

ANNEX N: PRE AND POSTTEST RESULTS

Results: Pre and PosttesT
For Curamericas-Guatemala / MSP Trainings

Date of training: ____/____/____ Tepic(s): _____

Principal

Facilitators:_____

Participant	Organization	Pretest Score	*Posttest Score*	Change in Points	Change in Performance
PROMEDIOS					

Sup = Supervisor; IF = Institutional Facilitator ; HFN = Health facility nurse
HIS = HIS specialist; CF = Community facilitator

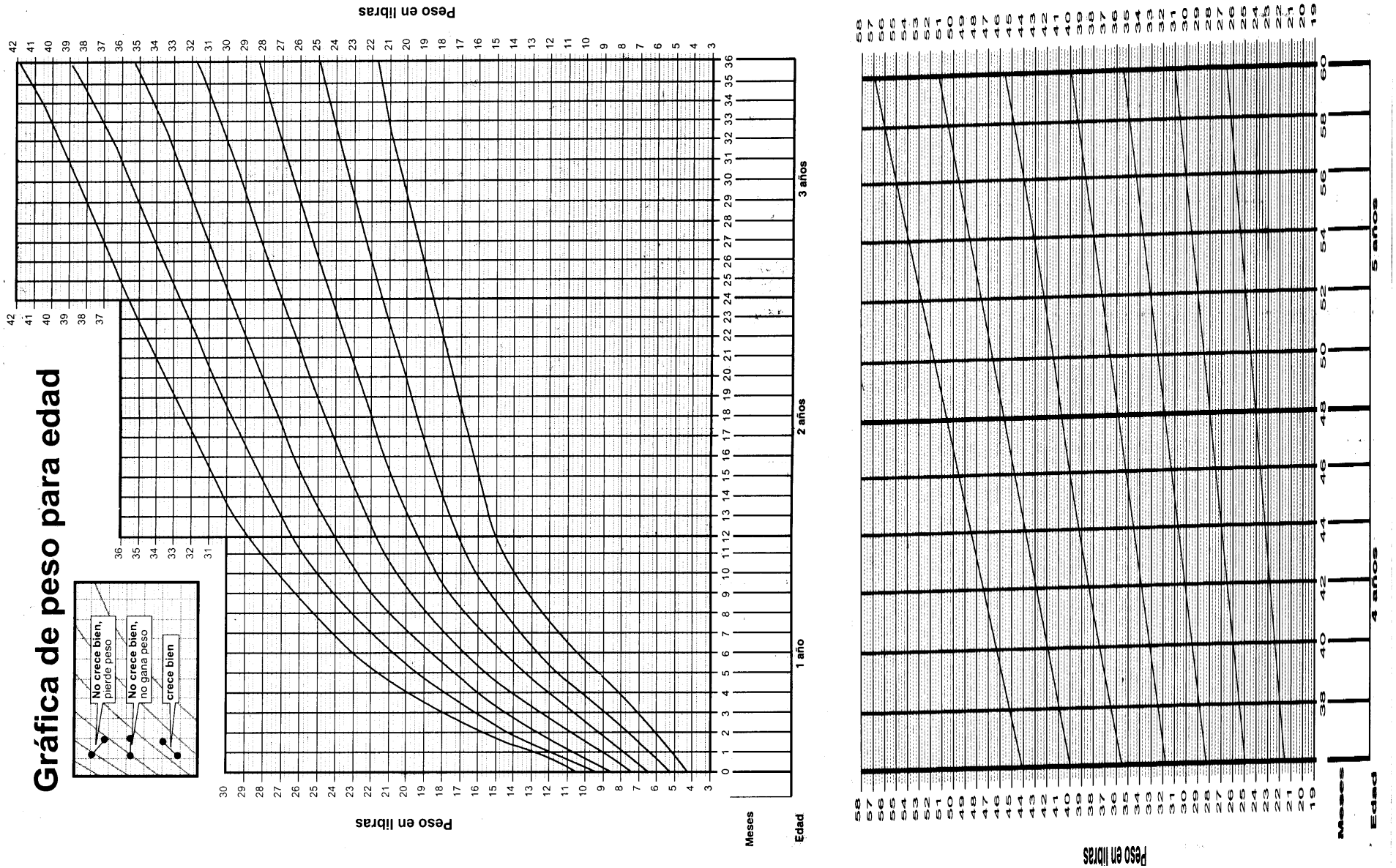
(Back of Form:)

For Example:

Participant	Organization	Pretest Score	*Posttest Score*	Change in Points	Change in Performance
John Smith	MOH	**58**	**92**	**34**	**81%**

Change in Points = Pretest score – Posttest score
Change in Performance = (Posttest Score – Pretest Score) / (100 – Pretest Score)

ANNEX O: CHILD'S GROWTH CARD



Control de peso

Fecha			Edad		Peso	
Día	Mes	Año	Años	Meses	Libras	Onzas

Control de Vacunas

Vacunas	Edad recomendada	Fecha Día	Mes	Año
BCG	Al nacer			
DPT y Polio 1	2 meses			
DPT y Polio 2	3 meses			
DPT y Polio 3	4 meses			
Tres Viral	12 meses			
DPT y Polio R1	18 meses			
DPT y Polio R2	4 años			

Vitamina A					
1 6 meses	2 12 meses	3 18 meses	4 24 meses	5 30 meses	6 36 meses
Fecha	Fecha	Fecha	Fecha	Fecha	Fecha

Hierro					
1 Tratamiento		2 Tratamiento		3 Tratamiento	
Inicia	Termina	Inicia	Termina	Inicia	Termina

Desparasitante				
1 24 meses	2 30 meses	3 36 meses	4 42 meses	5 48 meses
Fecha	Fecha	Fecha	Fecha	Fecha

Calidad en Salud

Pro Redes Salud

Carnet del niño o niña

Nombre del niño o niña

Fecha de nacimiento Día Mes Año

Sexo M F

Nombre de la madre o cuidador/a

Nombre del padre

Número de vivienda

Número de sector

Comunidad

Municipio

Area de Salud

2002

ANNEX P: RESUMES OF KEY STAFF

Mary E. DeCoster
2516 B Foxwood Drive
Chapel Hill, NC 27514
919-968-3685
mdecoster1@earthlink.net

Education

May 2002 The University of North Carolina at Chapel Hill, Department of Health Behavior & Health Education, **Master of Public Health**

- **Thesis**: Empowerment education for promoting breastfeeding among Latinas: A pilot evaluation

January 1983 The University of North Carolina at Chapel Hill, School of Information and Library Science, **Master of Library Science**

May 1977 The University of South Florida at Tampa, Interdisciplinary Natural Sciences, **Bachelor of Arts**, Honors

Awards

2000 United States Public Health Service Public Health Traineeship

2001 James R. Briley Scholarship

Languages

Fluent in **Spanish,** working knowledge of Portuguese and French.

Experience

2003-Present: Child Survival Program Specialist
Curamericas, Raleigh NC. Program Manager for Child Survival Project in Guatemala. Develop curriculum and health education materials for use in training field staff and volunteers. Backstop all aspects of project. Assist with other Curamericas projects as needed.

2002-2003: Latino Parent Educator
Welcome Baby, Durham County, NC. Develop curriculum and facilitate classes for immigrant Latino families on a wide range of parenting and health topics, such as breastfeeding, nutrition, domestic violence, family planning, positive discipline, and more. Train volunteers to provide telephone support for new parents. Advocate for families to assist them in overcoming barriers to access to health care and other services.

2001-Present: Bilingual Lactation Consultant
UNC Hospitals, Chapel Hill, NC. Provide breastfeeding education and support for Spanish speakers at UNC Hospitals in maternity care center and in pediatric clinics. Provide breastfeeding training updates for health care and allied health professionals.

2000-2001: Community Diagnosis Team Member
Durham, NC. As part of needs assessment team from the University of North Carolina conducted individual and focus group interviews with homeless men and women, interviewed health care providers and service providers, collected and analyzed demographic and epidemiological data, co-authored document about concerns and strengths of homeless people in Durham, organized community forum to present and discuss findings.

1991-2000: Community Based Lactation Consultant
Provided lactation services in hospitals, clinics, and in the community. Taught classes, provided trainings to health care providers at in-services, workshops, and conferences.

1998-2000: Perinatal Health Educator Trainer
Team member - developed a participatory model of childbirth classes for Latina women. Tested model, trained lay educators, volunteers, and health care and service providers.

1996-2000: Childbirth Educator
Taught childbirth, parenting, and family planning classes, in Spanish, at clinics in Durham, Orange, and Chatham counties.

1991-1997: Peer Counselor Program Administrator
Recruited and trained peer counselors to promote and support breastfeeding among ethnic minority and low-income women for a WIC funded program, Orange County NC.

1986-2001: Pharmaceutical Information Consultant
Glaxo Wellcome, Research Triangle Park NC. Indexed adverse drug reaction literature, conducted literature searches and produced bibliographies for the FDA. Managed the merger of Burroughs Wellcome and Glaxo's Regulatory Affairs libraries.

1983-1986: Pharmaceutical Information Specialist
Burroughs Wellcome Co., Research Triangle Park NC. Member of section maintaining adverse drug reactions database and product information database. Provided reference services and literature searches.

Volunteer Experience	**1990-Present: RESULTS Volunteer** Policy advocacy with international organization that is committed to ending hunger and the worst aspects of poverty. Advocacy work with members of congress and the media, for legislation and appropriate funding for issues such as maternal and child survival, tuberculosis and HIV/AIDS. Leader of Triangle Area RESULTS group. **1988-2002: La Leche League Leader** Volunteered with international breastfeeding support organization. Leader of English speaking and Spanish speaking groups. Held state office as Associate Coordinator of Leader Accreditation for North Carolina. Also served as Local Conference Chair and Area Recording Secretary.
Accreditations	**1997: ICEA Certified Childbirth Educator,** International Childbirth Association **1992 Certified Lactation Consultant, Re-certified 1997, 2002,** International Board of Lactation Consultant Examiners
References	*Available on Request*

ANNEX Q: COOPERATIVE AGREEMENTS

(Translated)
Letter of understanding for the program of Child Survival CS-18
Curamericas-Guatemala and
The Medical and Social Foundation for Rural Health

This letter describes an agreement between Curamericas-Guatemala (C-G) and the Medical and Social Foundation for Rural Health *Fundacion Medica y Social para el Desarrollo Rural* (FUMESDER), both incorporated in Guatemala.

Thanks to the abilities and participation of the leadership and employees of FUMESDER, C-G was granted funding by the United States Agency for International Development (USAID) for a five year proposal. This program officially began the first of October, 2002, with the mandate of implementing a maternal and child survival project in the rural area of the highlands of Huehuetenango, Guatemala.

As the direction of FUMESDERS continues establishing and clarifying its mission and institutional vision, C-G offers to its program of maternal and child survival tools that FUMESDER can use to attract new programs and donors from other institutions. During this process and the duration of its presence in Guatemala, C-G offers the following:

Agreements for Matching Funds, Goods, and Services
According to the program directives of Child Survival, the Minister of Health (MoH) within the programs of the district requires agreements with regard to matching funds, goods, and services (match). These agreements recognize and honor the contribution of the Ministry of Health to the program. These agreements should be between the MoH and C-G. The agreements should also note that FUMESDER is directly collaborating with C-G.

Any other association or agreements with regard to match made by the Child Survival program should use these directives, with C-G as the principal partner, and naming FUMESDER as a collaborating partner.

Ownership
All the items bought with funds from USAID should be used for the Child Survival program and by its personnel. Any violation of the use of these funds would have grave legal implications for Curamericas. During the operations of C-G in Guatemala, items or equipment acquired with funds from the US will be considered property of C-G.

When C-G ceases to exist in Guatemala, all property acquired during the life of the organization will be transferred to FUMESDER for its use. Any materials given in kind for C-G will be considered property of C-G until the organization ceases to exist in Guatemala. Then it will be transferred to FUMESDER.

Personnel
The programs of Curamericas Guatemala require direct participation from local personnel. These employees will be under the direction of C-G. These employees will receive a contract from C-G and will be working solely for the programs of C-G.

In addition, the technical and administrative staff of Curamericas will provide and financially support a program coordinator for managing the administrative and financial aspects of C-G. In an effort to help capacity building for the program of FUMESDER the program coordinator will also help FUMESDER and its board in writing proposals to acquire new programs. However, the main priority of the coordinator will be the programs of C-G. The coordinator will follow up on possibilities and contacts for the program as suggested by the board of FUMESDER, and will develop proposals and look for potential donor organizations.

Capacity Building by Curamericas
As was discussed in January 2003 between the Curamericas Executive Director and the Board of FUMESDER, Curamericas is extremely interested in the growth and development of FUMESDER. While Curamericas cannot provide funds directly to FUMESDER for this growth, or tow support the general operating costs of the board, Curamericas is disposed to offer to facilitate a workshop for the leadership of FUMESDER to help them identify and determine the goals and vision of the organization. All the costs associated with this seminar will be covered by Curamericas. Additionally, any source of materials previously created by Curamericas that can help with the growth and development of FUMESDER will be provided as necessary.

Changes
Any addition or changes to this letter of understanding will not be valid unless they have been written and approved by C-G and FUMESDER

Dr. Mario Rodrigo Valdez Ramirez	Dr. Ariel Danilo Rodríguez Hernandez
Representante Legal	Representante Legal
CURAMERICAS GUATEMALA	FUMESDER

(Translated)

AGREEMENT

Head of the Health District of San Miguel Acatan and

CIVIL ASSOCIATION OF CURAMERICAS GUATEMALA

We, Rafael Rodriguez Mejia, director of the Health district of San Miguel Acatan, according to the possession document number 07/2003, April 1, 2003, volume 3, folio 49, of the district of health of San Miguel Acatan, Huehuetenango and Mario Rodrigo Ramirez, the Legal Representative of the Civil Association of Curamericas Guatemala, in the legal capacity accredited by inscription in the of the civil registry of the Department of Quetzaltenango. Under part 44, folios number 212 and 216 of the volume of Official Persons number 7, September 4, 2001. We affirm in the present agreement the following clauses:

FIRST: GENERAL OBJECTIVE

The present agreement has as its objective the establishment of standards for coordination of the Child Survival Project that will be carried out in the following municipalities: San Sebastian Coatan and San Miguel Acatan, Huehuetenango.

SECOND: SPECIFIC OBJECTIVES.

The standard of Coordination defined in the present agreement has as specific objectives to give priority to the maternal and child population, which is a group at high risk for morbidity and mortality, with four components: 1) Maternal Health: through prenatal care, administration of tetanus toxoid vaccine, nutritional supplementation, care during birth and the postpartum period, family planning services, and education about cancer prevention; 2) Infant and Child Health: apply standards of IMCI care to children under five years of age. 3) Health Care Services for those with health care emergencies and illness, with an emphasis on the Maternal/Child group. 4) Environmental Health: Promote quality control of infection control, sanitary waste management, and food hygiene.

THIRD: BENEFICIARIES.

The population that will indirectly be benefited is 401,000 inhabitants (the entire population). Direct beneficiaries are 20,553 inhabitants: 9,281 preschool aged children and 1,272 of reproductive age (from age fourteen to forty nine years of age) living in the jurisdictions of the two municipalities.

FOURTH: OBLIGATIONS OF BOTH

Responsibilities of the Health District

- Set norms, supervise, monitor and evaluate the delivery of basic health services.
- Coordinate with the CIVIL ASSOCIATION OF CURAMERICAS GUATEMALA (which can be abbreviated as CURAMERICAS GUATEMALA):

Provision of instruments of the health information system (SIGSA). Agree upon the number of families and the personal of the basic health team. 2) Facilitate carrying out the activities of the National Program of Immunization. 3) Supply medication according to the epidemiological profile of the district. 5) Assist with training for CURAMERICAS GUATEMALA. Supply a copy of the training materials. 6) Supply the project with an institutional facilitator assigned to a jurisdiction and with a motorcycle, by October 2003. 7) Help with the search for funding from international agencies so that the project will be sustainable for middle and long term planning. 8) At the beginning of the third year provide city funding for an institutional facilitator assigned to an urban and peri-urban jurisdiction. 9) Provide prenatal vitamins, Vitamin A, Iron Sulfate and Folic Acid for the direct beneficiary population (children 0 to 5 years and women of reproductive age, 14 to 49 years) 10) Provide contraceptives and supplies for the family planning program. 11) Provide support with ambulatory doctors according to the Cuban cooperation agreement.

Responsibilities of CURAMERICAS GUATEMALA:

- Present the program plan with Objectives, Goals, Activities, Expected Results, time and resources needed.
- Provide the salary for the Medical Directory of the Child Survival Program, an administrator, secretary, two educators, a community organization and participation specialist, an information technician, an assistant information technician, an institutional facilitator for the jurisdiction of San Sebastian Coatan beginning in March 2003, 2 institutional facilitators for two jurisdictions of San Miguel Acatan beginning in March 2003, 4 community facilitators for San Sebastian Coatan beginning in March 2003, 8 community facilitators for San Miguel Acatan beginning in October 2003, 2 institutional facilitators for San Sebastian Coatan beginning in October 2004, 4 community facilitators for San Miguel Coatan beginning in October 2004.
- An annual incentive for 400 health communicators.
- Supplies: 3 motorcycles beginning in Marcy 2003, 2 motorcycles beginning in May 2003 and 2 motorcycles beginning in October 2004.
- Educational materials
- Support in training community and institutional people.
- Supervision, monitoring and evaluation of the delivery of basic services according to the child survival project proposal.
- Payment for the costs of transporting supplies and medicine.
- Payment for fuel and maintenance for the motorcycles provided to the institutional facilitators of the districts: one for the Health Center
- Provide refreshments and lunch for the technical meetings and workshops on Infant and Maternal Mortality in the district of San Miguel Acatan beginning in March 2003

FIFTH: EFFECTIVE DATES

The present agreement will be in effect beginning the date of signing to the 30th of September of 2007.

SIXTH: TERMINATION

The present agreement can be terminated in the following cases:

- For failure to comply with any of the parts of the agreement
- When the agreement expires.

SEVENTH: SHARING RESULTS

The results should be shared with both signatory parties.

EIGHTH: RESOLVING CONFLICTS

Any conflicts which arise with respect to the interpretation and application of the present agreement will be solved by the parties involved. After resolving a conflict an agreement will be written by both parties and will become an addendum to this agreement.

NINTH: ACCEPTANCE

We explicitly state that we have read every part of this agreement and understand its contents, object, validity and legal effects. We ratify, accept and sign, the twenty first of April of two thousand and three, in the municipality of San Miguel Acatan, Huehuetenango, Guatemala

Professional Nurse: Rafael Rodríguez
Director of the District of Health
San Miguel Acatan
Huehuetenango

Doctor: Mario Rodrigo Valdez R.
Legal Representative
CURAMERICAS GUATEMALA